

LONG-RANGE SURVEILLANCE UNIT FORCE STRUCTURE
IN FORCE XXI

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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

LONG-RANGE SURVEILLANCE UNIT FORCE STRUCTURE IN FORCE XXI, by
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This study evaluates the capability of the current long-range surveillance (LRS) force to accomplish the reconnaissance requirements expressed in the emerging operational concepts of *Joint Vision 2010*. The study analyzes the role of LRS operations in the Army's past and present doctrine. Additionally, the study analyzes what the future intelligence collection requirements are in accordance with *Joint Vision 2010* and what role LRS units are capable of playing in the accomplishment of those requirements. Tactical command and control and training are the criteria used to establish a qualitative analysis by which to determine if the current LRS force structure is adequate to meet the needs of *Joint Vision 2010* intelligence requirements. The study concludes with the observation that though LRS units are required in accordance with the Army's most current doctrine, the current organization and force structure does not support the future reconnaissance requirements expressed in the emerging operational concepts of Joint Vision 2010. The study recommends a reformation of the current organization and force structure from separate detachments and companies under division or corps control to a LRS battalion assigned to the military intelligence brigade of a contingency corps. The battalion would be capable of providing modular, tailorable, force projection LRS detachments within their assigned division area of operation. Each LRS detachment will be designed, organized, trained, and equipped to accomplish the intelligence collection requirements of the future battlefield.

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ABBREVIATIONS

| | |
|--------|-------------------------------------|
| AC | Active Component |
| ALB | AirLand Battle |
| AAN | Army After Next |
| AOE | Army of Excellence |
| AOR | Area of Operation |
| ARNG | Army Reserve National Guard |
| BRS | Base Radio Station |
| BDA | Battle Damage Assessment |
| CSAR | Combat Search and Rescue |
| CONUS | Continental United States |
| D3A | Decide, Detect, Deliver, and Assess |
| FM | Field Manual |
| FEBA | Forward Edge of Battle Area |
| FLOT | Front Line of Troops |
| HALO | High Altitude Low Opening |
| HAHO | High Altitude High Opening |
| HF | High Frequency |
| HPT | High Payoff Target |
| HUMINT | Human Intelligence |
| IMINT | Imagery Intelligence |
| IO | Information Operations |
| JTF | Joint Task Force |

| | |
|---------|--------------------------------------|
| JRTC | Joint Readiness Training Center |
| JV 2010 | Joint Vision 2010 |
| LRRP | Long-Range Reconnaissance Patrol |
| LRS | Long-Range Surveillance |
| LRSC | Long-Range Surveillance Company |
| LRSD | Long-Range Surveillance Detachment |
| LRSU | Long-Range Surveillance Unit |
| MTW | Major Theater War |
| MI | Military Intelligence |
| MOUT | Military Operations in Urban Terrain |
| MOOTW | Military Operations Other Than War |
| METL | Mission Essential Task List |
| NAI | Named Area of Interest |
| NEO | Noncombatant Evacuation Operation |
| NCO | Noncommissioned Officer |
| OC | Observer-Controller |
| OPTEMPO | Operational Tempo |
| RC | Reserve Component |
| SATCOM | Satellite Communications |
| SIGINT | Signal Intelligence |
| SAW | Squad Automatic Weapon |
| SME | Subject Matter Expert |
| SASO | Support and Stability Operations |

| | |
|--------|---|
| TO&E | Table of Organization and Equipment |
| TTP | Tactics, Techniques, and Procedures |
| TA | Target Acquisition |
| TEB | Tactical Exploitation Battalion |
| TAI | Target Area of Interest |
| TAA | Total Army Analysis |
| TRADOC | Training and Doctrine Command |
| USAIS | United States Army Infantry School |
| USAICS | United States Army Intelligence Center and School |
| UAV | Unmanned Aerial Vehicle |

CHAPTER ONE

BACKGROUND

Combat forces and battlefield commanders need accurate and timely intelligence concerning enemy forces, terrain, and weather. Commanders must make timely decisions to place the right mix of combat power at the right place at the right time. Commanders are under increasing pressure to make the correct decision while reducing the risk to soldiers and equipment, particularly high value equipment. Their decisions are partly based on information gathered for intelligence purposes. Human intelligence (HUMINT) is a category of intelligence derived from information collected and provided by human sources. HUMINT has always been a primary source of information within the intelligence collection system. Since 1986, long-range surveillance (LRS) units have been a primary source of HUMINT (Field Manual (FM) 7-93 1995,1-1).

One can review military history and conclude that accurate intelligence on the enemy has had a direct impact on the success or failure of any military operation. Understandably, military commanders found having knowledge of the enemy and his activities reduced uncertainty in their plan and provided an operational and strategic advantage. Modern LRS and reconnaissance units were first established during World War II with units such as the Alamo Scouts of the 6th Army in the South Pacific. Although some of the missions the Alamo Scouts performed were direct action, the passive collection of combat information proved to be one of the greatest values to their commander, Lieutenant General Walter Krueger. The Alamo Scouts were created based on his observation of a successful navy amphibious scout unit that early in the island-hopping campaign from New Guinea northward could penetrate deep into enemy

territory and collect intelligence that otherwise would never have been available to their commander Commander William Coultas (Taylor 1985, 132-138). Commander Coultas established this unit to conduct small-scale sabotage operations and to collect intelligence on the enemy. Until Commander Coultas established this secret United States Navy team, sometimes called Amphibious Scouts, he experienced little success in intelligence collection (Taylor 1985, 130-131). As Lieutenant General Krueger observed the success of this unit during the campaign in New Guinea, he determined that he needed the same capability. He also knew that the task of infiltrating soldiers into enemy territory to collect intelligence on the enemy was a difficult one and that only highly motivated and trained soldiers would have a chance for success (Taylor 1985, 132-134). Finding volunteers was only the beginning of the selection process. All volunteers were required to have the qualifications of physical stamina, courage, good swimming skills, excellent health, intelligence, and expert marksmanship. After a screening process, the volunteers embarked on a rugged and challenging six-week training course that tested their ability to perform basic surveillance and reconnaissance tasks. At the conclusion of the course there was a secret ballot to select the best officer and the six best men. This seven man team was the beginning of the Alamo Scouts (Taylor 1985, 132-133). This program continued for the next year, and ten additional Alamo Scout teams were formed using the same selection method. The remainder of the soldiers in the class returned to their units to teach other soldiers the skills they learned in the program and perform surveillance missions for their commanders (Krueger 1953, 30).

Since World War II, modern surveillance and reconnaissance units continued to evolve with Long Range Reconnaissance Patrol (LRRP) and Special Forces (SF) units in

the Vietnam conflict. It was there that the mission profile changed to long-duration static surveillance or slow-moving reconnaissance operations. Military Assistance Command Vietnam Studies and Observation Group (MACV-SOG) was a unique organization that had the mission requirement to collect operational and strategic level intelligence. In an era of increasing constraints and restrictions placed on an operational unit by a higher headquarters, MACV-SOG was uniquely structured to avoid this. They were extremely successful because they did not have the restraints of a higher headquarters that was disinterested or unfamiliar with the employment of LRRP teams in a high-threat area (Singlaub 1989, 294-297). Their chain of command and authority to execute specialized missions bypassed the conventional chain of command that was laden by restrictions. They had the authority to select qualified personnel and use unique equipment to perform classified missions to collect intelligence on the North Vietnamese in Laos, Cambodia, and North Vietnam. Their ability to infiltrate, move undetected throughout the enemy area, conduct resupply operations, and exfiltrate with invaluable intelligence proved that well trained soldiers can accomplish a mission that was formally considered to be impossible (Meadows 1990).

Additionally, infantry divisions and separate brigades in Vietnam were manned with LRRP units to help the commander see the battlefield more clearly (Summers 1985, 231-232). Throughout the Vietnam conflict long-range surveillance and reconnaissance units became a common intelligence collection asset. These units were called on to perform direct action missions, and they successfully accomplished these missions. This trend of employment gave commanders an aggressive killing asset rather than a passive intelligence collector. In time, the success of the LRRP units created animosity and

prejudice with regular Infantry units and commanders. This traditional prejudice against elite units within the military was not uncommon but rather a repeat of the historical reaction to organizations or people who are thought to have received special treatment or attained a preferred status. This trend, coupled with the basic American fascination with gadgets and the introduction of advanced technology into the military, resulted in all LRRP type units being deactivated in 1974 (O'Dawe 1990, 10).

This deactivation created a gap in HUMINT collection. For twelve years the LRS capability was missing from the conventional force as technology became the primary collector of all intelligence requirements. In the mid-1980s, United States Army Training Doctrine Command (TRADOC) and Fort Benning recognized that technology would not be able to fill the void left by the deactivation of LRRP units. A team was put together at Fort Benning and they developed the structure of a new LRS capability that could satisfy the combat commander's need for intelligence that otherwise was not available (Donovan 1997). In 1986 the teams proposed force structure was approved and the current LRS unit structure was provisionally activated. This structure established an LRS detachment at the division level as part of the Military Intelligence Battalion. Additionally, a LRS company was established at the corps level as a part of the Military Intelligence Brigade.

At the corps level, a long-range surveillance company (LRSC) provides the corps commander with an organic HUMINT capability. Likewise, at the division level the long-range surveillance detachment (LRSD) is the division commander's primary deep HUMINT capability. These units are specially trained and equipped to collect HUMINT for the battlefield commander on areas of interest deep in the enemy's rear area. They augment, complement, and validate other collection systems that are more vulnerable to

limitations, such as weather, range, terrain masking, and enemy countermeasures. LRS teams are trained to maintain continuous surveillance on a Named Area of Interest (NAI) for up to five days. They are an all-weather, all-terrain intelligence collection capability which can provide the division or corps commander a timely and accurate picture of the enemy in the deep area of interest or in the next combat phase. LRS units are part of the overall intelligence collection process. When employed properly, an LRS team not only provides continuous surveillance on a NAI, but can confirm other intelligence assets.

The Problem

The tactical and administrative command and control of LRS units has been an issue since their activation in 1986. The dual proponency between Fort Huachuca and Fort Benning has been an issue in regards to training and manning. Fort Benning has the responsibility to train and maintain doctrine while Fort Huachuca is responsible to man the LRS detachments and companies. This confusion is prevalent down to the tactical level. The contribution of LRS as a collection asset is widely understood; however, to train, plan, and execute an LRS mission is not. Utilization and employment of LRS units are not taught in the Military Intelligence School nor are they taught in the Infantry School. The first United States Army Training and Doctrine Command (TRADOC) course that teaches LRS tactics and employment is at the LRS leader course, which is focused on the LRS soldiers, noncommissioned officers (NCO), and detachment commanders only. Interestingly, there is no course for senior leaders at the division or corps level that teaches the employment of LRS teams in combat. This disconnect allows for the misutilization of LRS units; therefore, they are viewed as a costly organization requiring extensive training with little impact on intelligence collection (TRADOC

1997). With this in mind, equipping LRS teams and unit headquarters with current state-of-the-art communications and surveillance gear is considered expensive and often ignored in the budgeting process.

LRS teams and unit headquarters require quality-training time. One can review military history and observe that units with challenging missions enjoyed success when they had sufficient time to train. This example is well made with the Special Operations Group (SOG) teams in Vietnam. Because of a common headquarters that was fenced and focused, no mission distracters interfered with the team's training or execution of their assigned missions (Meadows 1993). Without a doubt had this undistracted operational environment not been the case for SOG in Vietnam, their mission success rate would have been reduced considerably (Meadows 1999).

Because of the unique mission for LRS and given the area of operation in enemy territory in which they will operate, continuous training is essential to their success. This operational area can extend 250 kilometers beyond the forward edge of the battle area (FEBA) (see figure 1).

The training required for an LRS team to be proficient in surveillance and reconnaissance tasks is extensive and involves high-risk training. Once trained, teams must continue to train to maintain their skills in all essential tasks. Field craft skills are perishable. Often LRS teams experience external training distracters that impact on their training cycle. These distracters could be reduced given a higher headquarters that could provide a focused training strategy and cycle. Current LRS training plans and schedules are incorporated into the Military Intelligence Headquarters training schedules. These training schedules routinely compete with support taskings from any of the higher

headquarters, battalion or brigade limited budgets, and an approval process for unique and hazardous training. The burden of overcoming these challenges is with the LRS detachment commander or company commander.

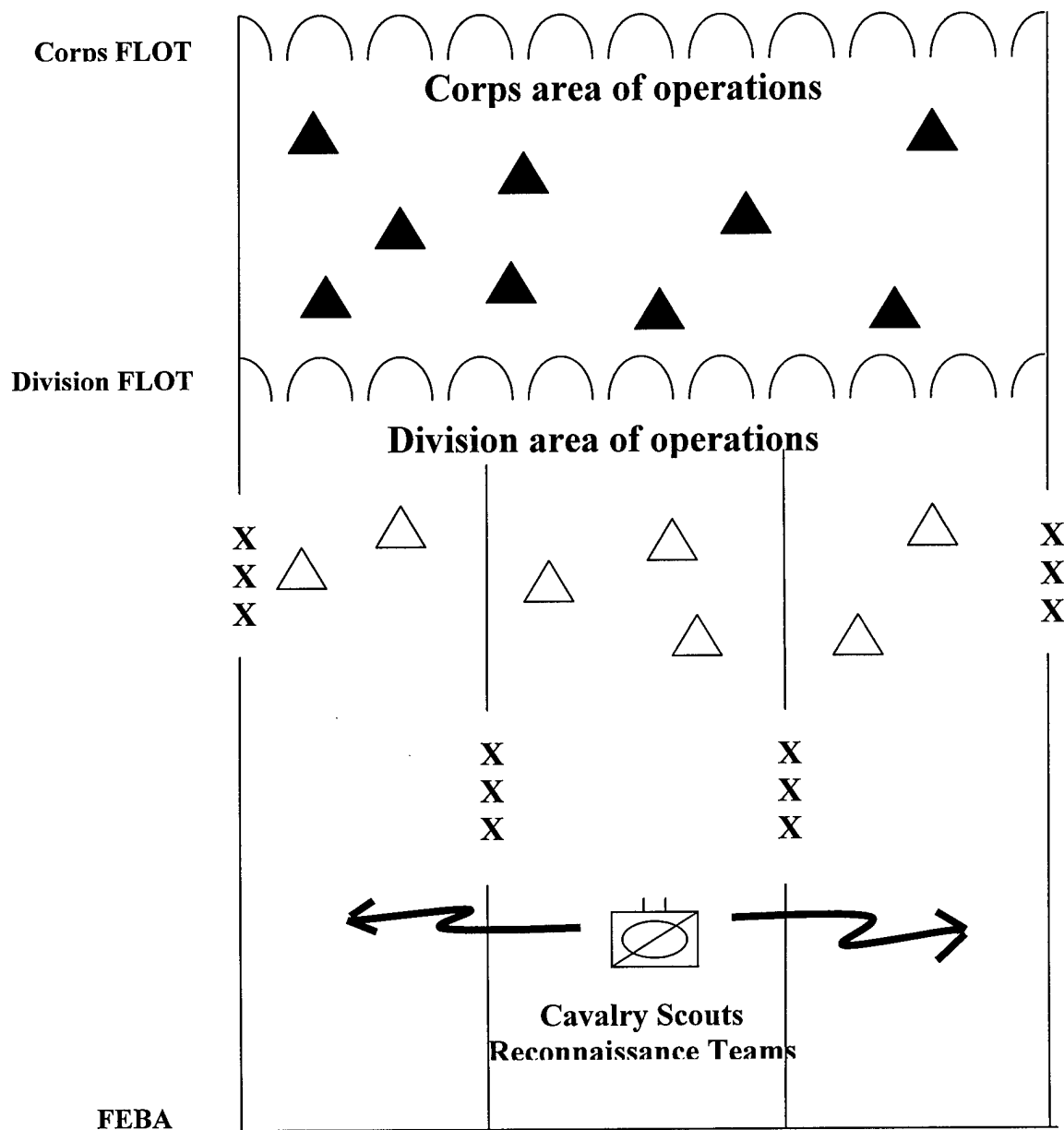


Figure 1. Long-Range Surveillance Area of Operation. (Source: FM 7-93, 2-10.)

Proposed research question: Is an LRS battalion at corps level a better force structure to train and command and control to perform all LRS missions identified in FM 7-93, *Long-Range Surveillance* than the current force structure?

LRS units are unique organizations whose missions fill two voids. The first is the seam on the battlefield between conventional and special operations reconnaissance forces. Specifically, this seam is the area and difference in the mission between battalion and brigade scouts, division cavalry, and Special Forces (SF) teams in a special reconnaissance (SR) role. There is no overlap in the area of operation and the levels of proficiency vary greatly between the conventional scout force and Special Forces detachments. The second void is in the MI (military intelligence) community. Other than LRS, there is no other asset that can perform continuous surveillance on an NAI. Simple and significant weather conditions, such as rain, snow, fog, low cloud cover, or radio interference can defeat the most sophisticated ground-based or aerial surveillance systems. The best intelligence the MI community can provide to a commander is validated intelligence. In order to validate intelligence, two or more collection systems must confirm the information. Commanders still desire a trained set of human eyes on the ground to confirm enemy activity and or compliment other collection assets. Actual and real-time observation is indisputable validation and affords a commander confidence as he makes decisions for his command (Shelton 1996).

As intelligence collection assets, LRS units were placed in the table of organization and equipment (TO&E) of division and corps MI tactical exploitation battalions with other corps and division Human Intelligence (HUMINT) and Signal Intelligence (SIGINT) collection assets. The employment of LRS teams was, and to an

extent, remains a weakness throughout the MI community. The MI leadership fully understands how to employ intelligence collection assets. However, LRS presents a unique challenge in that it requires sending soldiers into an area of operation from which they will be difficult to extract if the operation is not well planned. The risk associated with an LRS team deployment is interpreted as very high. Additionally, the coordination requirements during the planning phase for an LRS team are significant. The success of an LRS team greatly depends on planning products, such as target folders, collection plans, topographic data, and weather forecasts that they receive in isolation during the planning phase. The complexity of planning, coordinating, and resourcing an LRS team's complete mission requirements tends to overwhelm an already busy division or corps Intelligence staff. It is much easier and there is less risk involved to program a high technical surveillance platform that has sufficient stand-off capability to observe the same intelligence target. Over time, intelligence collection plans tended to assign an NAI to assets that did not have the capability to observe in the detail required to answer the PIR rather than employing LRS. What evolved was the misuse of LRS units that could observe that same NAI and provide the level of detail required.

During Joint Readiness Training Center (JRTC) rotations, LRS detachments have been misutilized in several ways. First, because the rotation is brigade focused, the LRS teams are often Operational Control (OPCON) to the brigade. Not only does the brigade commander have little experience in how to use LRS, he is too preoccupied with the current close fight to look toward the next phase of operation or the divisions deep fight. LRS is designed and is best utilized in the deep fight, were the division and corps commanders are focusing their collection assets. Additionally, the brigade commander

does not have the resources to insert, extract, emergency extract, or communicate with LRS teams. At JRTC, this deficiency has been addressed by assigning the General Staff Intelligence Officer (G2) the responsibility to select named area of interest (NAI) and prepare the planning packet (JRTC AAR 1997). The G2 and the division commander controlled the LRS detachment. The G2 assisted the detachment commander in the planning phase and the division commander was the approving authority to deploy a team into enemy territory. The division designated the NAI for LRS team observation. This maintained command and control of LRS at the division level. LRS teams reported directly to the detachment who in turn sent the report to the G2. This maintained operational responsibility for the deployed teams with the detachment who had trained the teams and knew their capabilities and limitations. The LRS reports were designed to answer the approved PIR (Priority Intelligence Requirements) that the G2 established. With this established, the success and survival rate of LRS teams increased from below 50 percent to 90 percent or better.

Additionally, home station assets, such as aviation, were deployed to support the rotating brigade and were not available to the LRS detachment. This was easily fixed by maintaining the responsibility of LRS at division level and dedicating division assets to the LRS mission. Assigning dedicated or as required aviation assets from the brigade task force to a LRS insertion or extraction had a negative impact on brigade resources and would often interfere with the brigade operational timeline. For the majority of the time the brigade did not have the aviation assets due to combat loss. However, establishing divisional assets to support LRS operations created habitual relationships and allowed

joint Standard Operating Procedures (SOP) for effective execution of all phases of an operation involving these assets.

Assumptions

This study makes three assumptions. The first is that LRS units will not leave the total Army force structure, and the current force downsizing has stopped. The basis for this assumption is the requirement for LRS assets that are in the Army's capstone manuals, FM 100-5, *Operations*; FM 100-15, *Corps Operations*; and FM 100-40, *Tactics*. Technology cannot replace the human element in the reconnaissance fight. LRS teams will be used as a confirming collector in conjunction with or in lieu of Signal Intelligence (SIGINT) and Imagery Intelligence (IMINT) platforms, when those platform limitations prevent them from conducting their mission (Anders 1999, 13).

The second assumption is that division and corps commanders need and want an LRS capability. This is based on personal conversations with previous and current division and corps commanders; they want the LRS capability to use in their intelligence collection plans.

The third assumption I have made is that an LRS battalion can be established in a reasonable amount of time. This is based on the understanding of the total army analysis (TAA) process and that force structure change is more likely for approval if additional manning slots are not required from other units or branches.

The Research Question

This study will assess the current structure with regards to command and control as well as the level of training that can be obtained. The research will then compare the current structure to one that changes the command and control structure, and thus the

training focus. The primary question is: Is a LRS battalion at corps level a better force structure for command and control and training to conduct all LRS missions identified in FM 7-93 than the current structure of separate detachments and companies?

The secondary questions are: Can the Army create an LRS Battalion without increasing the number of personnel (officer and NCO) currently assigned in LRS positions? and What are the potential missions for LRS units based on reconnaissance requirements in FM 100-5 (draft)?

Research Methodology

This thesis will compare the current structure for LRS to the proposed structure. Two criteria will be used to evaluate each structure, they are training the force and tactical command and control. The research is broken down into three phases. The first phase will determine the intelligence collection requirements of LRS units expressed in emerging operational concepts and doctrine. The second phase of the research will develop a questionnaire that will be distributed to a small sample population of leaders in the Army who are currently commanding or have previously commanded, trained, or employed LRS units. There is a significant number of LRS leaders who have served in command positions that will be interviewed using the questionnaire. During this phase, conclusions drawn from the interviews and questionnaire responses will be used in an attempt to establish a common preference for force design and command structure that facilitates both mission readiness and prevents misutilization of LRS. The third and final phase of the research approach will be to determine criteria, based on the literature review and the responses from the sample population, which would assist in the evaluation of the proposed LRS structure. The thesis will conclude with specific

recommendations on the best force structure and command and control design to facilitate a credible mission and training reputation that will maintain LRS in future force designs.

Key Definitions

Combat Information: Data that can be used for fire or maneuver decisions as received without further processing, interpretation, or integration with other data (FM 101-5-1).

Human Intelligence (HUMINT): Any intelligence collected through human sources (FM 34-20).

Imagery Intelligence (IMINT): Imagery derived from, but not limited to, radar, infrared, optical, and electro-optical sensors (FM 34-20).

Intelligence: The product resulting from the collection, evaluation, analysis, integration, and interpretation of all available information concerning an enemy force, foreign nations, or areas of operations and which is immediately or potentially significant to military planning and operations (FM 101-5-1).

Measures and Signature Intelligence (MASINT): Information gathered by technical instruments, such as radars, lasers, passive electro-optical sensors, radiation detectors, seismic, and other sensors to measure objects or events to identify them by their signatures (FM 34-20).

Proponency: Any staff, school, or organization assigned the responsibility for the development of a specific area of doctrine or training (*Army Dictionary and Desk Reference*).

Reconnaissance: A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy or about the meteorological, hydrographic, or geographic characteristics of a particular area (FM 101-5-1).

Signal Intelligence (SIGINT): Intelligence collected from locating, processing, analyzing, and reporting intercepted communications and noncommunications emitters (FM 34-20).

Surveillance: The systematic observation of airspace or surface areas by visual, aural, electronic, photographic, or other means (FM 101-5-1).

Technical Intelligence (TECHINT): Identifies or counters an enemy's momentary technological advantage, or by maintaining a friendly technological advantage (FM 34-20).

Total Army Analysis (TAA): A biennial force development process conducted by the Department of the Army to determine total force requirements using qualitative and quantitative analysis.

Limitations

This research is constrained by one limitation. The size of the sample population that will be interviewed or have a questionnaire sent to them is small. The distribution of the questionnaire is limited to key individuals in the field who are currently considered LRS subject matter experts (SMEs). LRS personnel strength is approximately 600 soldiers, of which only 10 percent are in leadership positions that can have a significant influence on this study. The intent is to gather data by distributing the questionnaire to the most experienced individuals in the field of LRS training and employment. While the

sample may be small, (approximately thirty questionnaires), the data gathered would be analyzed in order to make a set of inferences and generalizations, which will assist in answering the thesis questions.

Delimitations

LRS force structure and units addressed in this study are reflective of the active component only. Although the reserve component has LRS capability in the National Guard and should maintain it, this study will not address the Reserve Component other than in the affiliation of Reserve Component LRS companies and detachments with active units. The mission requirements that are addressed in this study are the current mission tasks listed in 7-93 MTP manual. There are additional missions that have been discussed in the LRS community that are worthy of consideration for future additions to FM 7-93 MTP; however, they will not be considered here. Finally, the population SMEs that will be interviewed and questioned will have gained their LRS experience in the last five years. These SMEs are the most familiar with the current trends in the community and will provide the best data.

Significance of the Study

The significance of this study is that it will attempt to develop a new LRS concept for the Army. This concept could provide for better focused training and better command influence with the higher headquarters staff, particularly the G2. Establishing the point of centralizing command for better mission focus is not new. One can read history from World War II to the present day and find this solution used predominantly, and it has been successful. Additionally, if the structure recommendation were approved, it would

add a battalion to the active component force during a time that the force has continually deactivated units and decreased unit authorized strengths.

CHAPTER TWO

LONG-RANGE SURVEILLANCE IN CURRENT AND EMERGING DOCTRINE

The primary purpose for reconnaissance and surveillance operations is to provide the commander specific intelligence on an enemy or terrain that will aid him in the conduct of military operations (FM-101-5-1 1997, 1-130). AirLand Battle (ALB) doctrine was based on the Army's ability to strike at the second echelon to prevent them from influencing the close fight. The Army corps was given the responsibility for deep operations in both the offense and defense (FM 100-15 1996, 3-14). Within these responsibilities there are two tasks that establish corps responsibility for conduct of the deep fight. One is the destruction of enemy units and critical targets, and the other is providing the commander with information and intelligence about enemy capability in depth (FM 100-15 1996, 2-6).

LRS employment doctrinal considerations for ALB are contained in FM 34-1, *Intelligence and Electronic Warfare Operations*, the Army's primary manual for military intelligence (MI) doctrine. This manual establishes how intelligence collection in an ALB scenario would assist deep operations. In this doctrine, collection units would provide early warning of enemy approach and activities. In order to find, track, and target enemy forces, enabling the battlefield commander to effectively interdict them at long range. Corps and division collection assets, including LRS units and national systems, would provide information critical to the commander's priority intelligence requirements (PIR) for deep operations. Deep collection operations locate high payoff targets (HPT), such as enemy second and follow-on echelons, critical command and control (C2) nodes,

reconnaissance elements, fire support elements (FSEs), and logistics trains (FM 34-1 1986, 4-9).

Validated or confirmed intelligence from two or more sources provides a commander not only actionable intelligence but also gives him more confidence in his decisions. Although there are SIGINT and IMINT assets that are employed on the modern battlefield, HUMINT is the most reliable source, and for a commander, the most desirable (Shelton 1995). With this in mind, one of the most critical requirements for a corps or division commander is knowledge of enemy activity in his Area of Operation (AOR) and if that activity will affect his mission or the force. The commander must achieve and maintain surprise and attack the enemy at a tactical disadvantage as often as possible. This will also allow the commander to get inside the enemy's decision cycle, keeping him guessing and off balance. To do this, the commander must see well forward and know the areas of operation and interest. He must also know the enemy's capabilities, strengths, weaknesses, location of forces, current movement trends, and activities. This information is obtained through intelligence activities that provide the basis for tactical and operational decisions. Conduct of Army operations is based on timely intelligence from organic and higher sources at corps and above. Real-time HUMINT information that confirms SIGINT, ELINT, IMINT, MASINT, and TECHINT collectors is the most desired. LRS units at corps and division play an active part in the Army operations by providing real-time HUMINT information (FM 7-93 1995, 1-4).

FM 34-1 addresses HUMINT under intelligence disciplines and functions. HUMINT is the oldest of the intelligence disciplines. HUMINT is particularly important in force protection during military operations other than war (MOOTW). The risk level is

lower to employ HUMINT assets and the ability to recover these assets is greater. HUMINT is not as restricted by weather or enemy counter intelligence collection operations as other technical intelligence collection assets. Interrogation and document exploitation are examples of HUMINT operations. HUMINT collection is also conducted by LRS units (FM 34-1 1986, 2-4). Additionally, FM 100-15 specifically addresses LRS, along with Special Operations Forces (SOF), as HUMINT collection assets available to the corps commander that can conduct special reconnaissance and surveillance operations. Since FM-100-15 was published, Special Forces teams have been available to division commanders as well. These missions are conducted in order to obtain or verify, by visual observation or other collection methods, information concerning the capabilities, intentions, and activities of an actual or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area (FM 100-15 1996, 2-25).

As discussed in chapter one, the operational employment for LRS employment in current doctrine on a linear battlefield is forward of the battalion reconnaissance teams and cavalry scouts at the tactical level of war. The Long-Range Surveillance Leaders Course (LRSLC) at Fort Benning, Georgia, instructs and evaluates LRS soldiers and units in the conduct of long-range reconnaissance, surveillance, battle damage assessment, and target acquisition missions deep behind enemy lines. LRSLC uses infantry and ranger skills to enhance tactical and situational awareness in a training scenario that requires them to operate in enemy territory.

LRS teams are organized, trained, and equipped to enter enemy areas to observe and report enemy dispositions, movements and activities, and battlefield conditions. The

teams' missions, targets, and objectives are based on the intelligence requirements of the commander. Teams infiltrate close to, but not in their AOR by air, ground, water, or stay behind. While avoiding contact with the enemy and local civilians, LRS teams will move to their NAI and observe for indicators that confirm or deny the commander's PIR. They may emplace a variety of sensors and special purpose equipment to detect, observe, and monitor enemy activities. They perform other specified collection tasks as well. LRS teams are not intended to conduct direct-action missions. Their mission of limited reconnaissance, stationary surveillance, target acquisition and battle damage assessment is different from the missions of most SOF units (FM 7-93 1995, 1-2). LRS teams maintain these missions as their primary missions and are not directed to perform offensive actions such as direct action missions performed by Special Forces teams.

A LRSC is organized as an organic company in an MI brigade at the corps level (see figure 2). It consists of 163 personnel, organized with a headquarters platoon, communications platoon, three surveillance platoons--each consisting of six surveillance teams. The leaders are airborne qualified and routinely are ranger qualified. All other personnel in the company are airborne qualified (FM 7-93 1995, 1-6). It is a volunteer organization that has a limited recruiting capability and authority. Additionally, they have an assessment program to determine the best-suited soldier for assignment (see figure 3).

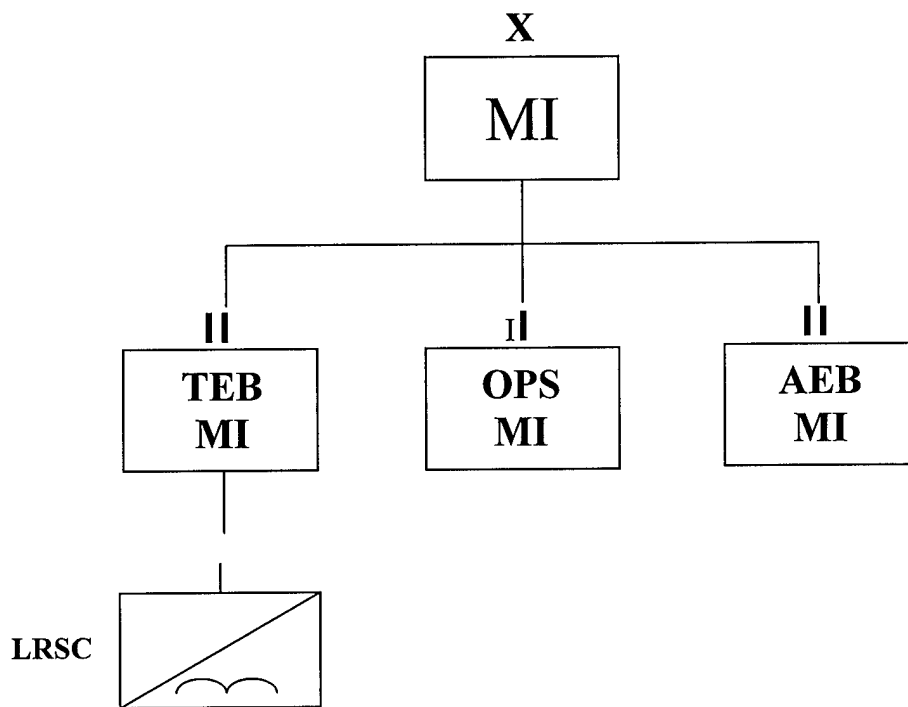


Figure 2. MI Brigade Structure with LRSC Organic

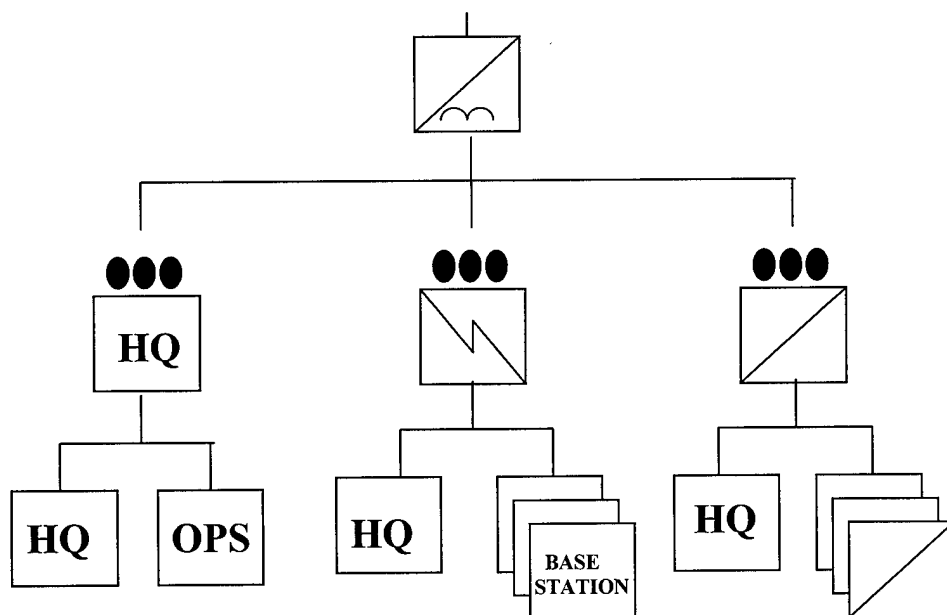


Figure 3. Long-Range Surveillance Company. (Source: FM 7-93 1995, 1-6)

The LRSD is organized as a detachment organic to the MI battalion at division level. Some divisions may have them organized in the Cavalry Squadron. A LRSD consists of fifty-six personnel, organized into a headquarters section, communications section, and six surveillance teams (figure 4). The leader qualifications are the same as in the LRS company. The volunteer and selection criteria are also the same.

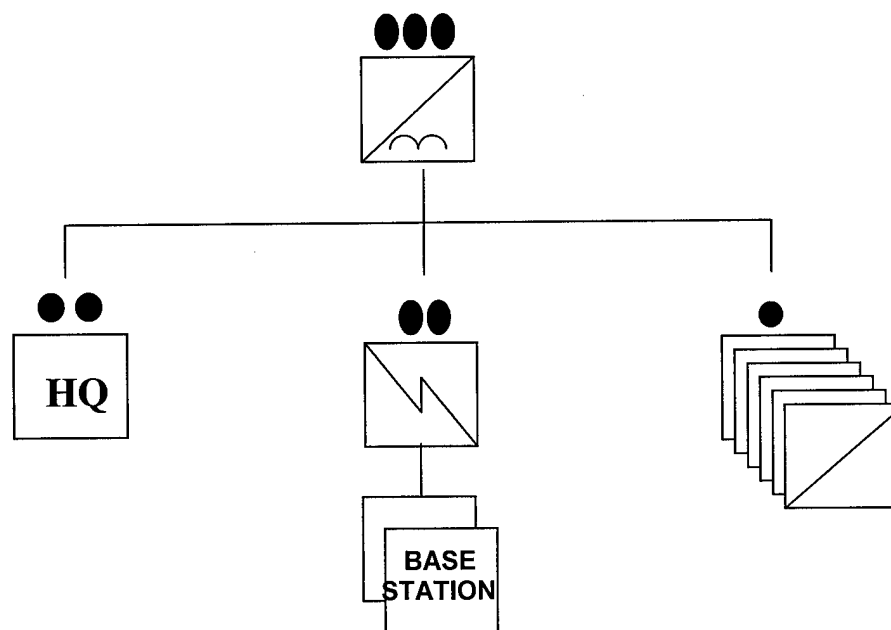


Figure 4. Long-Range Surveillance Detachment (Source: FM 7-93 1995, 1-8)

The LRS team is comprised of six men. Each team is lead by a ranger-qualified staff sergeant (SSG), and assisted by a ranger-qualified sergeant (SGT). The other members of a LRS team may rank from specialist (SPC) to private (PVT). Teams can operate independently with little or no external support in all environments. They are lightly armed with limited self-defense capabilities. They are equipped with relatively

lightweight, man-portable equipment. The teams are limited by the amount of weight that they can carry or cache. Because all team members are airborne qualified, all means of insertion are available to the commander when planning operations. Additionally, one team per detachment and six teams per company are also authorized high-altitude low-opening (HALO) capability to add to their insertion options (FM 7-93 1995, 1-9).

Although LRS teams are not special operations forces, their doctrine, tactics, equipment, and techniques are similar. The organization, strength, and equipment of teams are based on the mission and the environment of the operational area. They are authorized to maintain a variety of equipment to enhance their capabilities. LRS units have the following capabilities:

1. To be committed in specific locations within enemy-held territory by stay-behind methods or delivery by land, water, or air, to include parachute.
2. To operate in enemy-held territory for up to seven days with minimal external direction and support.
3. To conduct surveillance, reconnaissance, target acquisition, and battle damage assessment missions in all types of terrain and environments.
4. To conduct operations in bad weather and over difficult terrain.
5. To be recovered by air, land, or water; to linkup with advancing forces; or to return using evasion techniques.
6. To operate using planned, automatic resupply drops or special equipment cache sites set up by the LRS unit or other friendly forces. (FM 7-93 1995, 1-9).

LRS units are a high-risk asset and do have limitations. FM-7-93 identifies the following as limitations and should be used as considerations during planning.

1. Mobility is restricted to foot movement in the area of operations.
2. Teams cannot maintain continuous communication with the controlling headquarters because of equipment limitations and the enemy's use of radio and electronic surveillance devices. Teams only establish communications at scheduled times or to report critical combat information.
3. Organic medical capability is limited to individual first aid.
4. Teams are lightly armed and have limited self-defense capability. They fight only to break contact.
5. Long-range surveillance units require support from higher headquarters in:
 - a. Maintenance, supply, mess, medical, administration, finance, personnel, and chaplain services.
 - b. Area communication integration and access to a common-user telephone system.
 - c. Frequency management for HF (high frequency) and SATCOM (satellite communications) access.
 - d. Packing, rigging, and loading supplies and equipment for aerial resupply operations and parachute insertion operations.
 - e. Army or Air Force air transportation to move the unit to the area of operations and ground transportation to move personnel and organic equipment in the area of operations.
 - f. Intelligence products from division or corps headquarters.

LRS units were activated in 1986 as a part of the MI community. They were structured in the Tactical Exploitation (TE) brigades and battalions of infantry corps and

divisions, respectively. Their primary missions were directly in line with the execution of the new ALB doctrine. Formed at the division and corps, LRS teams were designed to be inserted deep between the first and second echelons of our Warsaw Pact enemies, establish surveillance on a NAI, and report critical combat intelligence based on the commander's PIR. They had potential follow-on missions of target acquisition (TA) and battle damage assessment (BDA).

Currently, organic LRS units support only 50 percent of the corps and divisions in the active force: two of the four corps and five of the ten divisions. The XVIII Airborne Corps at Fort Bragg, North Carolina, and V Corps in Europe each have an LRS company. No divisions in V corps have LRSDs in their structure (see figure 5). The five divisions that have organic LRSDs are 2nd Infantry Division, 10th Mountain Division, 25th Infantry Division, 82nd Airborne Division, and the 101st Airborne Division (Air Assault). It is important to note that the majority of the Army LRS capability is in the XVIII Airborne Corps (see figure 6). The XVIII Airborne Corps is structured with the majority of the light infantry in the Army. The current personnel strength of LRS units in the AC (Active Component) is 600 (Anders 1999).

The current Army National Guard (ARNG) force structure includes three LRSCs and nine LRSDs. Of the three LRSCs, two are responsible for the LRS missions of AC corps. The F Company, 425th Infantry (LRS) of the Michigan ARNG is aligned with I Corps, and H Company, 121st Infantry (LRS) of the Georgia ARNG is aligned with III Corps. Each of these LRS units are separate and independent of each other. There is no overall tactical LRS headquarters at any level that is responsible for METL (Mission Essential Task List) development, training, tactics, techniques and procedures. Each LRS

unit develops its own mission essential task list (METL) based on the missions of the corps or division they are supporting. The approving authority for that METL is the MI battalion commander of the active component command they are designated to support (Anders 1998). As awkward as the command and control relationship between reserve component LRS units and active component higher headquarters is, the active component LRS has had to battle its own issues of surviving the Army structural changes as well.

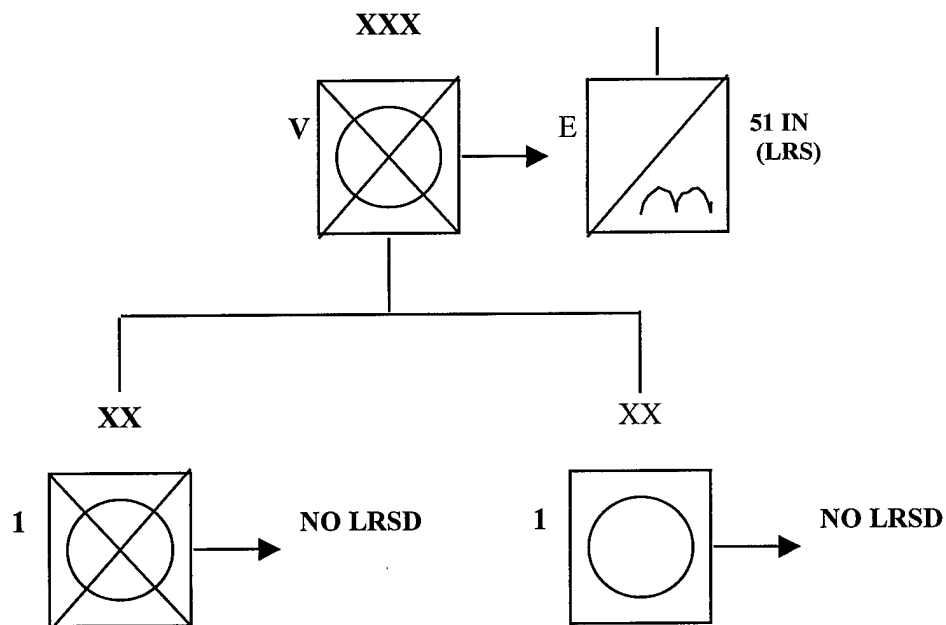


Figure 5. V Corps Long-Range Surveillance Force Structure

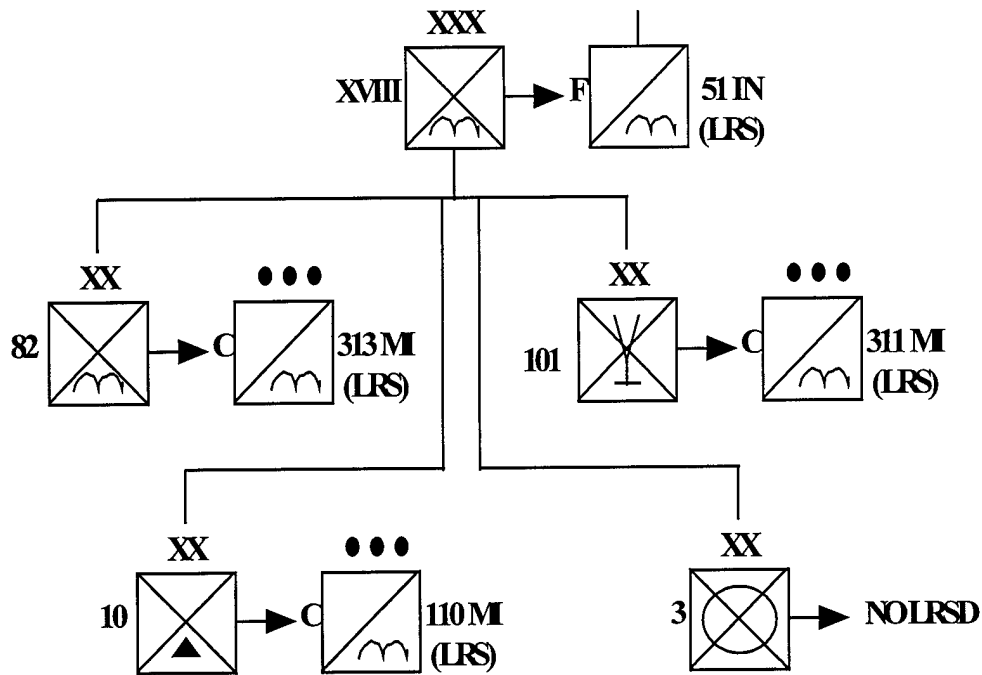


Figure 6. XVII Corps Long-Range Surveillance Force Structure

Through the drawdown and TAA process, LRS units have deactivated at a higher rate than the rest of the Army. Today only 50 percent of the corps and division have organic LRS units (Anders 1998). This drawdown is not only disproportionate to the Army rate but is also contrary to the LRS capability requirement addressed in all doctrine since ALB. The LRS capabilities are specifically addressed in the Army's most current doctrine. These capabilities can also be employed against future threats to the US and its interests. Emerging operational concepts identified in Joint Vision 2010 (JV 2010) provide the structure for this.

CHAPTER THREE

RESEARCH METHODOLOGY

Research Approach

The research approach is comprised of three phases. The first phase will determine if LRS capabilities are relevant in current and future Army doctrine and if there are any new or emerging missions tasked to an LRS unit or that an LRS unit can perform. The second phase of the research will consist of distributing a questionnaire to key individuals in the field who are considered SMEs on LRS operations and training. Along with the questionnaire, interviews will be conducted with SMEs that are available at CGSC. Both of these methods will address the issues of command and control, and training. As stated previously, LRS personnel comprise a small fraction of the total active Army force structure. The intent is to gather data by conducting the interview and distributing the questionnaire to the most experienced individuals in the field of LRS training and employment. The SMEs will have the qualification of LRS command experience at division or corps level as well as JRTC O-C experience or command of D company 4th Ranger Training Battalion at Fort Benning. While the sample may be small, the data gathered will provide a conclusion that will assist in answering the thesis question.

The third and final phase of the research will be to review past and current trends in the Army that may show how the Army has structured units for best performance. The criteria collected throughout these phases will assist in the evaluation of an LRS organization and force structure that would accomplish their future intelligence collection missions. Requirements for the selection of the evaluation criteria would be that the

criteria must be definable and measurable. Taken together, the study will attempt to build a paradigm which will assist in answering the research question below and provide a quantifiable recommendation for a HUMINT collection organization to carry the Army into the twenty-first century.

Research Question

This study is attempting to determine the best organization and force structure for long-range surveillance units in order to meet the intelligence collection requirements expressed in the emerging operational concepts addressed in *Joint Vision 2010* based on command and control, and training.

The subordinate research questions below will also help to evaluate the best structure for future LRS units:

1. What are the future intelligence collection requirements expressed in the emerging operational concepts addressed in *Joint Vision 2010*?
2. What are the potential missions for LRS units based on the identified intelligence collection requirements?
3. Within the current force structure and in light of the intelligence collection requirements, what is the correct organizational structure for future LRS units?

The literature review resulted in the development of three hypotheses concerning LRS organizations and capabilities.

1. The current LRS force structure and organizations do not adequately support a force projection Army that must be prepared to contend with future military operations other than war, stability and support operations as well as the threat of conducting operations in two near-simultaneous major theater wars.

2. The emergence of the asymmetrical threat and future urbanization of global populations portend a greater reliance on HUMINT and the capabilities of LRS units.

3. LRS units are capable of accomplishing additional missions other than reconnaissance, surveillance, target acquisition, and battle damage assessment (BDA). Specifically, the surveillance and communication capabilities of LRS units can play a critical role in force protection. Other possible missions include combat search and rescue (CSAR) and pathfinder operations.

A method to test these hypotheses will be to analyze the responses generated by the questionnaire administered to a small sample population of SMEs.

Literature Analysis

The literature analysis has two objectives. The first objective is to determine the relevance of LRS units in future operations. The second objective is to analyze emerging operational concepts in order to understand the requirements of LRS units in the twenty-first century. This determination will answer the first two subordinate research questions that reference the future intelligence collection requirements expressed in the emerging operational concepts addressed in *Joint Vision 2010*, and the potential missions for LRS units based on identified intelligence collection requirements.

Questionnaire and Interview

The questionnaire and interviews will focus on questions relating to the hypotheses listed previously. The purpose of the questionnaire and interviews is to establish a consensus among LRS SMEs concerning the future force structure, organization, roles, and missions of LRS units.

The questionnaire and interviews will be distributed to a small sample of officers and senior noncommissioned officers who have trained, employed or commanded LRS soldiers and units. The questionnaire will be mailed or electronically deliver to the selected leaders. The SMEs will be asked to complete and return the questionnaire in one week. The results of the questionnaire will be analyzed to determine if there is a common preference among the SMEs and if this preference will assist in answering the thesis and hypotheses questions. The questionnaire is divided into three sections: LRS force structure, LRS organization, and roles and missions. The desired results and construction of the survey pertaining to each of these areas are described in detail below.

Long-Range Surveillance Force Structure

The questionnaire and interviews will attempt to gain a consensus on the proper force structure for LRS in today's Army. The literature review in chapter two identified that active component LRS units support only 50 percent of the active force. The questionnaire will attempt to gain a consensus from the SMEs concerning the adequacy of the current force structure and its ability to accomplish future missions.

Long-Range Surveillance Organization

The questionnaire and interviews will attempt to determine the correct organization and leadership structure for future LRS units. The literature review suggests that future organizations must be CONUS-based, modular organizations capable of rapid deployment. Additionally, these organizations must be multicomponent, capable of quickly integrating reserve component organizations to augment the active force. This section of the questionnaire will also attempt to gain a consensus on whether there is a requirement for a centralized command and control element for LRS units above the

company and detachment level. The literature review revealed that no individual above the rank of captain commands LRS units. Consequently, there is a lack of continuity and synchronization among LRS units in the active and reserve component

Future Long-Range Surveillance Roles and Missions

The purpose of this section of the questionnaire will be to attempt to gain an understanding of what the respondents feel are the future roles and missions of LRS units in light of the emerging operational concepts of *Joint* and *Army Vision 2010* and the future threat analysis from the United States Army Intelligence Center and School (USAICS). The literature review suggests that within twenty years one-third of the global population will be in cities. In spite of the technological advantages of airborne surveillance platforms and precision engagement capabilities, adversaries in an urban environment will attempt to gain an advantage due to the US reluctance to inflict collateral damage to non-combatants and urban infrastructure. HUMINT will play a key role in combating these potential adversaries.

The literature review suggests that force protection will play a critical role in future MOOTW and SASO operations. LRS teams are already trained in passive, stealthy surveillance of named areas of interest (NAIs) from either one or multiple locations. These skills are the same as those required to conduct countersurveillance and reconnaissance missions waged against potential terrorist attacks on US military buildings or personnel.

Summary

Qualitative analysis will be the primary method to analyze the literature. Quantitative analysis will be used to determine descriptive statistics derived from the

questionnaire. The conclusions based on the literature review will be compared to the results of the questionnaire and interviews of the SMEs.

CHAPTER FOUR

ANALYSIS

This chapter will analyze the subordinate research questions based on the results of the literature review and answers derived from the responses to the questionnaire and interviews conducted with local LRS subject matter experts (SMEs). The first section of this chapter will analyze the literature review in relation to the relevance of LRS units in the current Army force structure. The second section will provide the demographics of the small sample population of LRS SMEs who were administered the questionnaire or interviewed locally and summarize their comments to the questionnaire.

Results of the Literature Review

This country has emerged from the Cold War as the world's only superpower. The United States armed forces have had to refocus their methods, roles, and missions to meet the threats of a world where technology is advancing at an unprecedented rate. No longer is technology or the ability to buy it exclusive to the advanced world or the Westernized portion of the third world (US Army Intelligence Center and School 1999, 5). The conceptual template for how America's armed forces will face the threats of the twenty-first century is addressed in *JV 2010*. *JV 2010* provides the framework for an improved intelligence capability and command and control structure that will maintain pace with the information age. *JV 2010* has developed four operational concepts by which the joint military will fight its future conflicts regardless of where on the spectrum it may be. They are dominant maneuver, precision engagement, full-dimensional protection, and focused logistics. The application of these four concepts will provide the United States with the capability to dominate an adversary across the full range of

military operations. This “full-spectrum dominance” will be the key characteristic of the armed forces in the twenty-first century (*Joint Vision 2110* 1996, 1-2).

Army Vision 2010 is the blueprint for the Army’s contributions to the operational concepts identified in *Joint Vision 2010*. It identifies the operational imperatives and enabling technologies needed for the Army to fulfill its role in achieving full-spectrum dominance. *Army Vision 2010* also serves as a linchpin between Force XXI, the Army’s ongoing process to manage change and advance into the twenty-first century with the most capable Army in the world and the Army After Next (AAN), the Army’s emerging long-term vision (*Army Vision 2010* 1996, 1-2).

The Army sees its role in achieving full-spectrum dominance in decisive operations by executing a deliberate set of operational patterns. These patterns are not phases, nor are they sequential. They serve to focus the many tasks armies have always performed in war and other military operations. The patterns include projecting the force, protecting the force, shaping the battlespace, decisive operations, sustaining the force, and gaining information dominance (*Army Vision 2010* 1996, 10). It is within the information dominance pattern that LRS capabilities play a key role.

In October 1995, General William Hartzog, TRADOC commander, stated “Our core doctrine should be unified. We must fold our approach to peace operations, humanitarian assistance operations, and other military activities short of general war into the body of our Army operations doctrine and not treat these as separate and special subsets” (FM 100-5 1997, 2-1). FM100-5 addresses the full-spectrum of conflict and identifies four categories of operations. They are offensive, defensive, stability, and support. Addressing stability and support as equal to offence and defense, military

operations other than war (MOOTW) and support and stability operations (SASO) are now firmly entrenched in the Army's doctrine. Arguably, MOOTW and SASO have occupied the majority of the military's time, effort, and resources even though they are at the lower end of the spectrum of conflict.

While the Army needs to be prepared to fight major theater wars, the current and future mission environment will likely be at the low end of the spectrum of conflict. The Army will more likely be involved in noncombatant evacuation operations (NEO), peacekeeping, humanitarian relief, and others--all the actions covered by the rubric of MOOTW and SASO (TRADOC 1999, 6). Recent operations in Panama, Somalia, Rwanda, Haiti, Bosnia, and humanitarian efforts in South America as well as here in the United States, are a preview of potential mission requirements that lie in the Army's future. Not only is there a wide range of missions the twenty-first century Army must be prepared to accomplish, but it will be expected to maintain pace with the frequency at which missions will occur. These missions illustrate the complexity of force projection operations in both mid intensity conflict and noncombat missions. As the current trend of rapid deployment amplifies the critical role that technology will play in the future, there has been an equal emphasis on the soldier who must operate and control this technology.

Potential enemy states perceive US military forces as unparalleled in the execution of conventional military operations. In fact, the US military's philosophical and resource commitment to support *JV 2010* indicates that the US has no intention of relinquishing its conventional military superiority status as long as it has the capability to maintain it. Therefore, US adversaries will attempt to develop new methods to reduce US conventional military superiority, render it irrelevant, or expose other perceived

weaknesses in US national or military strategies. These new methods include asymmetric approaches, and will become the dominant threat paradigm of the early twenty-first century information age (TRADOC 1999, 14).

World census estimates project that by the year 2020 two-thirds of the global population will live in urban areas. These areas will have a population density two to three times greater than the average first-world medium-sized city today. Large urban populations pose a special challenge to US Army forces responsible for identifying and defeating an adversary while minimizing friendly casualties and limiting collateral damage to noncombatants and civilian infrastructure. For these reasons, the urban environment provides a natural form of asymmetry to key components of *Joint Vision 2010*. Precision engagement on a battlefield populated by non-combatants is extremely difficult and dangerous. Full-dimensional protection in man-made terrain, which is not digitized but is well known by an adversary, is difficult at best. The Task Force Ranger experience in Mogadishu, Somalia, painfully demonstrated this point. The obvious advantages presented by the urban challenge, teamed with urbanization trends, make such operations likely in a variety of US military deployments and missions. Across the spectrum of potential military operations, intelligence collection will play a key role in achieving full-spectrum dominance.

The INTEL XXI forces will operate as an integral part of Force XXI. These forces will be designed, equipped, and trained to support Force XXI operations across the full spectrum of conflict and in all environments with a full range of capabilities. The following are eight capabilities that will enhance the future Army's ability to accurately see the battlefield of the future.

1. Providing wide area, multi spectral surveillance of the battle space.
2. Aggregating and fusing bottom-up with top-down feeds as low as brigade level.
3. Producing an "in-time" common relevant picture of battlefield visualization and situational awareness.
4. Accurately locating, identifying and tracking high payoff targets and conducting BDA.
5. Accessing, leveraging, and interoperating with joint and multinational capabilities.
6. Conducting Command and Control Warfare (C2W) operations.
7. Providing support to force protection operations.
8. Assisting in friendly force tracking.

Based on the literature review, the following LRS capabilities have been established:

1. To be committed in specific locations within enemy-held territory by stay-behind methods or delivery by land, water, or air, to include parachute.
2. To operate in enemy-held territory for up to seven days with minimal external direction and support.
3. To conduct surveillance, reconnaissance, target acquisition, and battle damage assessment (BDA) missions in all types of terrain and environments.
4. To conduct operations in bad weather and over difficult terrain.
5. To be recovered by air, land, or water; to linkup with advancing force; or to return using evasion techniques.

6. To operate using planned, automatic resupply drops or special equipment cache sites set up by the LRS unit or other friendly forces. They also use captured supplies and equipment.

LRS capabilities and skills would assist in the majority of the highlighted INTEL XXI force capabilities listed above. Based on this comparison, a correlation can be drawn between the intelligence requirements and LRS unit capabilities. As stated in chapter two, the four doctrinal missions for LRS teams are surveillance, reconnaissance, target acquisition and battle damage assessment (BDA). These missions need not change in order to play a role in the fulfillment of future intelligence collection requirements for *Joint or Army Vision 2010*. By maintaining the capability to execute these missions, LRS teams can assist in fulfilling the first four items of the future intelligence requirements. In fact, the current capabilities of LRS units are not only nested within the first four requirements, but also have the capacity to fulfill additional intelligence needs.

LRS teams are trained to conduct stealthful surveillance operations on point and area NAIs and to transmit timely and accurate information over a wide variety of communications equipment. Because of this, they can assist in the seventh requirement for the intelligence community to provide support to force protection operations, which has not been addressed in the doctrine of LRS.

Additionally, LRS units can play a role in assisting friendly force tracking not only within the spectrum of their previously stated capabilities, but also under the umbrella of a dedicated, organic combat search and rescue (CSAR) organization for their supported unit. The infantry and ranger skills, fieldcraft, familiarity of LRS missions and operations, as well as the evasion and recovery (E&R) skills that a LRS unit possesses,

makes it a natural choice as an organic corps, division, or task force combat search and rescue (CSAR) organization.

Lastly, an analysis of the potential future threat to this country, its allies, and the Army outside the continental United States (OCONUS) requires unique intelligence collection organizations capable of operating in a nonlinear area of operation that is likely to include cities and towns. The execution of "full-spectrum dominance" in large urban populations will pose a unique challenge to US Army forces responsible for defeating an identified opponent while minimizing friendly casualties and limiting collateral damage. Heavily populated areas can negate US forces technological advantages and challenge the target identification process. Precision target engagement on a battlefield cluttered with civilians while maintaining force protection will be a challenge. The emergence of the asymmetrical threat and future urbanization of global populations will demand a greater reliance on HUMINT and the capabilities LRS units currently possess will be an ideal asset for intelligence collection.

The requirement for LRS units is just as relevant today as it was during the development of AirLand Battle doctrine. The unique capabilities that LRS units offer are clearly reflected in the emerging operational concepts and will play a critical role in the execution of future military operations and the achievement of full-spectrum dominance. As much as the Army will depend on technology to help visualize the battlefield, it cannot allow itself to depend on technology alone. Adversaries to the US will employ efforts to disrupt its technological advantage. A well-trained LRS team can provide the indisputable, actionable intelligence that a commander will need to make a critical decision. As adversaries to the US employ countermeasures to its technology, its

equipment readiness strains under the pressure of constant use, and the "fog of war" complicates the interpretations of standoff sources; it will be the knowledge, discipline and quality training of US soldiers that will allow the military to prevail.

Sample Population Demographics

The distribution of the questionnaire was limited to the key individuals in the field who are currently considered as LRS subject matter experts. As stated previously, LRS personnel comprise only a fraction of the total active Army force structure, approximately 600 soldiers. Of this small LRS population, only 15 percent are in leadership positions at any point in time. The intent was to gather data by distributing the questionnaire to the most experienced individuals in the field of LRS training and employment. The majority of the sample population, whether interviewed locally or who responded by mail to the questionnaire, had been an LRS detachment or company commander, or held a key leadership position within their LRS unit. These LRS leaders held their commands or leadership positions within the last four to five years. This is important, as it shows their input to the questions are not only relevant, but are from recent experience and therefore current.

The sample population was asked to validate their experiences and qualifications. For this purpose they were asked four questions to establish their experience and command atmosphere they operated in (refer to the Appendix, Questionnaire). The first question asked them to identify the type of immediate higher headquarters their LRS unit was structured under. The remainder of the questions they were asked was to determine the length of time they were in command, how involved their higher headquarters was in LRS issues, and how many rotations they made to a Combat Training Center (CTC)

while in command. Finally, they were asked to identify the level of involvement their division or corps command group had in LRS issues. The sample population ranked from major to sergeant first class. The jobs held within the sample population ranged from former LRS unit commanders, LRS commanders select, a former commander of the US Army's Long-Range Surveillance Leader's Course and former LRS observer and controller at the Joint Readiness Training Center.

The results of the responses were relatively consistent throughout the sample population. The first question helped develop the command atmosphere in which the LRS commander worked. In regard to the type of higher headquarters their LRS unit was structured under, 95 percent operated within the tactical Military Intelligence (MI) battalion at the division or corps. All SMEs who commanded in the last three years operated as part of in an MI battalion.

The average time in command or in a leadership position for the SMEs was twenty to twenty-one months. This is above the Army average for company command and for the majority of the SMEs it exceeded their previous command time as a rifle company commander. When asked why they thought the time in command exceeded the Army average, the majority of the SMEs cited the amount of time to train in LRS tactics as the main reason. For the SMEs that filled TRADOC senior LRS positions as JRTC observer-controller positions and as the commander of the Long-Range Leaders Course at Fort Benning, the average time was seventeen to eighteen months, with the longest time being twenty four months.

The last question of the sample population further developed the command atmosphere they experienced working with senior leaders and staff at the division or

corps level. Interestingly, one-half of the SMEs included the G2 as part of the division or corps command group. They identified the G2 as a principal player in the mission selection for LRS teams. Of those SMEs who mentioned the G2 as part of their command group interaction, 85 percent had a positive experience and felt the G2 understood how to best place LRS teams on the battlefield. With the G2 involved, they clearly could see a better synchronized collection plan and realistically nominated LRS missions based on the PIR established in the planning phase. Sixty-five percent identified the generals in their command group as heavily involved with LRS issues, 25 percent listed their command groups involvement as medium, and only 10 percent indicated little to no involvement. Of the general officers in the command group, the overwhelming majority of the SMEs had interaction with the Commanding General (CG) the most. The remainder of the SMEs had the most contact with the Assistant Division Commander for Operations (ADCO). Only one SME mentioned any involvement with the Assistant Division Commander for Support (ADCS) and that was administratively in garrison. One hundred percent of the SMEs that had a division or corps command group involved with their LRS unit had a positive experience and felt they were supported and better trained.

The sample population interviewed in this thesis is representative of the Army LRS leadership population in terms of position and experience. Based on this conclusion, an inference drawn from their answers to the questionnaire will closely represent the total LRS community. The finding from their answers to the questionnaire will be reviewed in chapter 5.

CHAPTER FIVE

FINDINGS

Chapter four addressed the analysis of the literature review in relation to the relevance of LRS units in the current and future Army force structure. As stated in chapter four, the need for organic HUMINT capability to collect intelligence deep in enemy territory is recognized, addressed and mandated in the *Joint Vision 2010* and *Army Vision 2010*. Therefore, LRS is not only relevant, but also necessary to the doctrinal requirement of information dominance. This chapter will review and summarize the findings of the sample population's responses to the questionnaire mailed and the interviews conducted locally. With this analysis, the research will conclude with a recommendation on the best force structure and command and control organization for future LRS units. As described in chapter one, the baseline criteria used to evaluate the problem statement are tactical command and control, and training the force. The questionnaire addresses these two criteria in regard to the SME's command relationship with his higher headquarters and the impact the higher headquarters had on his unit's training needs. From these questions the SMEs were asked if they thought a self-sustained LRS organization could overcome some or most of the deficiencies they noted and if so, how. They were asked if the current force structure of separate LRS detachments and companies was sufficient and if not, to recommend force structure changes based on their experience. Finally, they were asked if they thought an LRS battalion structured at corps level would fix the deficiencies they noted in the questionnaire.

Results of the Questionnaire

The questionnaire was divided into three primary sections. The first section developed the SME's understanding of current force structure and the relationship between the active and reserve component. The second section focuses on the command climate and relationship between the LRS unit and its higher headquarters. Within this section, the SMEs addressed the issues they experienced in the area of tactical decision making as they interacted with the senior leadership of their division. The third section documented the SMEs recommendations on future structure changes they felt were necessary based on potential future missions throughout the spectrum of conflict. Throughout the survey, the two criteria of tactical command and control, and training were used to focus the discussion. The object of the questionnaire was to garner a consensus among the SMEs on whether an LRS battalion organized at corps level would be the best organizational structure to facilitate correcting the deficiencies they identified during the survey. The SMEs were not informed of the problem statement prior to being administered the questionnaire or interviewed. At the conclusion of the interview the SMEs were engaged in a discussion about the benefits and issues associated with an LRS battalion.

Long-Range Surveillance Force Structure

The purpose of this section was to gain an understanding of the SME's concept of LRS structure in today's Army. Additionally, it was important to gain their perception of the correct organization and leadership for LRS units as envisioned in the *JV 2010* concept of a modular, rapid deploying organization capable of integrating the reserve component as sub-organizations of the active force. The structure of the current LRS

organizations, number and size of LRS teams, and command and control arrangements were reviewed.

The SMEs were all knowledgeable and aware that active component LRS units support only 50 percent of the active force. They also understood that the light infantry divisions were the only conventional headquarters organized with organic LRS units. Five noteworthy points were brought to a decisive conclusion. An overwhelming majority concurred that:

1. LRS teams should not be controlled by headquarters lower than division (95 percent)
2. Every division and corps command headquarters prefers their own habitual LRS support (100 percent).
3. Heavy divisions require their own LRS units (85 percent).
4. A corps LRSC does not possess the organic capabilities to sufficiently support subordinate heavy division LRS missions (100 percent).
5. ARNG LRS units are not capable of maintaining the level of proficiency required in collective and individual tasks to support an active component corps or division (90 percent).

The reserve component LRS role in the Army's future deployment structure warrants additional review. The majority of the SMEs recognized the requirement for a modular organizational concept for LRS units (80 percent). They also understood that to do this, the active force will be augmented by the reserve component; reserve LRS units are organized in the Army Reserve National Guard (ARNG). The overwhelming majority of the SMEs concur that ARNG LRS units cannot be easily incorporated as a part of the

active force flow into a theater of operation and upon arrival in theater, be ready to execute a LRS mission (100 percent). Although there is an effort in the reserve component to affiliate or associate with an active LRS unit in order to define their wartime trace and focus, this is not adequate to improve their readiness level. All reserve component LRS commanders who attended the 1997 LRS leader's conference concurred that they would need an additional two weeks to one month of focused training to bring their unit readiness to the level comparable to their active component counterpart (TRADOC 1997). The readiness level is based on the unit's ability to perform the surveillance and reconnaissance missions only. Additionally, while the majority of the SMEs perceived that the current structure of the LRSC and LRSD organization as adequate (55 percent), they also recognized that should a slice of the unit deploy, the stay behind element would be degraded in its ability to continue training and maintain their readiness level. This finding is significantly higher for the LRSD (90 percent) than the LRSC (25 percent). The majority of the respondents also recognized that the current organization of LRS units does not possess the command and control and support elements required for rapid deployment into a theater of operation (85 percent).

In answering questions concerning the proper size of an LRS team, the majority (67 percent) perceived the current size of a LRS team (six men) is adequate to cover one named area of interest (NAI) from two surveillance sites for a period of seventy-two hours before their effectiveness was reduced by fatigue. All SMEs unanimously agreed that the six-man team could not cover two separate NAIs simultaneously. When asked if they thought a change to the team structure would increase the team's ability or range of responsibility, the majority (75 percent) of the SMEs answered that an eight-man or nine-

man LRS team would be capable of covering two separate NAIs simultaneously. Additionally, the mission profile and additional METL tasks have increased the equipment the team would carry. Not only would the equipment increase, but current Army equipment is heavy and bulky. The average SME estimated weight of a single rucksack of a six-man team would be in excess of one hundred and twenty pounds. With an increase in the team personnel, the weight would be reduced to one hundred pounds or less for each rucksack. This is a significant finding because it infers that two NAIs could be covered with 50 percent less personnel. Therefore, one team could perform additional tasks such as target designation and battle damage assessment on one employment into a threat area. Equally significant is that 90 percent of the respondents perceived that the nine-man team was the most effective size for an LRS team.

Command Climate

This section addresses command climate not only within the LRS unit itself, but also with regard to the immediate higher headquarters at the MI battalion and at division and corps levels. The specific focus was on the support the LRS leadership received by the higher headquarters on the full spectrum of training issues and sound tactical decisions on the tactical employment of LRS teams.

The areas of training that were addressed ranged from approval of training requests to preparing target folders for missions. Some specific training issues were common throughout the SMEs. They were schools, approval for specialized training, unrealistic tasking that were not METL based, and higher headquarters support for requests for external assets such as aviation, riggers, and water equipment. The issue with

schools and specialized training went hand in hand and therefore will be reviewed together.

The first area of discussion in this section addresses the SME's perception of the current internal command structure for LRS units and its effectiveness. The LRS unit commander, a captain, is the senior LRS leader under the current force structure. And in fact, the commander of an LRS detachment or company is the senior officer in the division or corps with current LRS training and experience. He will typically have a lieutenant as an executive officer at detachment level or lieutenants as LRS platoon leaders at company level. However, he is the single person whom his senior leadership will routinely ask for input to issues concerning LRS capabilities or employment. Consequently, there is a gap between the visibility and connectivity of the LRS unit and the command group at division or corps level which they support. An overwhelming majority (95 percent) agreed that the current command and control structure is inadequate to establish senior leadership focus on LRS issues that impede their ability to improve their readiness. Often, the SMEs experienced frustration when they could not approach the division or corps senior leadership to address these issues. They cited the battalion command as the predominant problem. The battalion commander would prefer to interface with division leadership rather than allowing the LRS commander. Often he would fail to articulate the issue and therefore would not get the assistance needed.

Eighty-five percent identified an MI battalion as their higher headquarters and 15 percent identified a cavalry squadron as their higher headquarters. All SMEs with command experience within the last three years were structured in an MI battalion. Of the SMEs who identified this issue (90 percent), 80 percent agreed that the issue with the

battalion command was not intentional neglect, but rather limited experience or lack of knowledge with LRS issues. Sixty percent of the SMEs felt their MI battalion commander did not support LRS unit needs because of their lack of knowledge of LRS. Of the 60 percent, all SMEs agreed that because of their MI battalion commanders' lack of knowledge, they were a hindrance to the planning and coordinating of training requirements as well as being hesitant in tactical decisions for LRS missions. The remainder of the SME population, 40 percent, felt that their MI battalion commander supported their needs and had an adequate knowledge of LRS capabilities. The majority of this population of 40 percent cited MI battalion commanders who let the LRS leadership make tactical decisions for the LRS teams and assisted in interfacing with the division staff provided the best atmosphere to operate in. The SMEs identified a role they needed their MI battalion commander to fill. This role was in the asset management part of the collection process. That is, the efforts that are required by the LRS headquarters, the LRS team, and the insertion assets to employ the team, are reduced or even voided if the team is not in the location to best utilize their capabilities.

Two training issues that were common among 95 percent of the SMEs were approval for hazardous and unique training requirements and relief from unnecessary external taskings. The majority of the SMEs had a problem with gaining approval to conduct hazardous training. LRS unique and hazardous training requirements generally revolve around the insertion and extraction techniques used to get into the threat area. These techniques include Special Purpose Insertion and Extraction System, High Altitude Low Opening (HALO), High Altitude High Opening (HAHO), and water insertion

techniques involving deploying boats and team members out of a CH-47 helicopter (HELOCAST), and finally, team members surface swimming in open ocean or bays.

The second issue was protection from unnecessary external taskings. These taskings typically originated from the division as well as the battalion. When asked if they thought LRS units should be exempt from external taskings, 100 percent of the SMEs said no. They understood that this was a way of life in the Army and to demand exclusion would be unrealistic, and they would be perceived as elitists. However, when the SMEs further discussed their frustration with this issue, a common trend was evident throughout all interviews and questionnaire responses. External taskings became a readiness issue when the scheduled training was interrupted or cancelled to fill the tasking. Because LRS detachments are small compared to regular infantry companies and there is only one detachment within a division, they establish an internal training cycle to maintain their readiness posture as well as their alert status. As a subordinate command in a MI battalion, the LRS detachment make up 25 percent of the strength of the battalion. To exclude the detachment from external taskings would be a burden on the remainder of the companies in the battalion. The common solution to this problem as identified by the SMEs was to not task the portion of the detachment that was in the training cycle. On average, this was approximately 33 percent of the detachment. The majority of the SMEs (95 percent) identified the main reason for this request as the amount of training required to gain and maintain proficiency at high risk missions in threat territory. Only a few SMEs (40 percent) were successful in establishing a policy protecting the portion of the unit in the training cycle. Of the remaining SMEs who did not establish a similar policy, 65 percent identified the battalion commander's lack of understanding of the perishable

skills as the reason. The remaining 35 percent identified the battalion command sergeants major's unwillingness to support the policy as the other dominant reason.

The final area within support for training is in regard to external asset requests. Based on the distance to the area in which LRS teams will be employed, the transportation and insertion means are an external asset to both the LRS unit and the MI battalion. The predominant asset used is aviation, which is used for an air assault insertion or extraction, Special Purpose Insertion Extraction System (SPIES) insertion or extraction, and an airborne platform to conduct HALO or HAHO insertions. The research has established the lack of understanding by the higher headquarters as a common trend in LRS problems. This trend continues in the area of support for external assets. In addition to this, the ability of battalion headquarters to request, track and monitor an asset request outside of their headquarters directly relates to their understanding of the training requirement to be conducted. Eighty-five percent of the SMEs highlighted the extensive effort required of them personally to manage the external asset requests from beginning to end. As stated earlier in this chapter, the LRS commander has very few personnel to assist in what most other units would have a battalion staff or higher to do. Requisitioning aviation assets to use in training requires support and approval from the MI battalion, the division, and the aviation unit supporting the request. As with most staff actions, there is a constant effort to track the request as it goes through the process until the asset is at the training site ready for training. This is not only extensive, but also labor and time intensive.

During the interviews conducted locally, one other point of discussion developed that is important to this research. The SMEs who had routinely enjoyed success in

training with external assets, did so by establishing a habitual relationship with the asset and its headquarters. Because of this relationship the proficiency of the LRS team, the planning of their missions, and tactical proficiency of employing them uncompromised was greatly enhanced. This was evident at JRTC. Typically, the LRS units would deploy from home station to JRTC with their aviation assets attached. These units were much more proficient in all tasks required to execute a mission than the units that relied on JRTC flight detachment to conduct their insertions and extractions. One JRTC requirement is to conduct a safety assessment of the rotating unit every twenty-four hours. An ad hoc relationship between ground and air units ranked high on the safety scale and often would require a senior observer-controller to approve the event to be conducted.

The last topic of this section dealt with the interaction of the LRS command and the battalion command as they relate to the decisions made in support of training. The SMEs were asked to discuss and identify the positive and negative points they experienced with their battalion headquarters. Sixty-five percent of the SMEs cited the predominant positive aspect they experienced with their battalion commander was that he left them alone to train. This was particularly common among the SMEs who identified their battalion commander as either having a lack of interest or as not knowledgeable of LRS issues. The majority of the SMEs characterized their battalion commander as not having any interest in their LRS detachment. This is an important observation because it identifies the lack of institutional training in the Military Intelligence community on LRS operations. This is also evident in the Infantry where the only institutional training is compartmented to LRS assignments at team leader and detachment level.

Thirty percent of the SMEs identified their battalion commander as having a positive attitude towards the LRS training needs and aggressively helped to solve problems. This included energizing their staffs to support LRS requirements as well. The SMEs in this category enjoyed quality training time and protection from unnecessary external taskings. They were also protected from unrealistic tactical missions developed by the G2 or G3 staffs during division level training.

Future Structure Change

The purpose of this section of the questionnaire was to gain an understanding of what the SMEs felt were appropriate force structure changes based on the future LRS requirements. The questionnaire first gained an understanding of what the SMEs felt were the future roles and missions of LRS units in light of the emerging operational concepts of Joint and Army Vision 2010 and the future threat analysis from the United States Army Intelligence Center and School (USAICS). The SMEs unanimously acknowledged the value of LRS in future intelligence collection and information operations (IO). Additionally, all SMEs understood the Joint Vision 2010 requirement of information dominance and that LRS would be an asset the Joint Force could benefit from. Of all SMEs, 90 percent concurred that LRS capabilities will play a key role in future MOOTW, SASO, and MOUT.

The questionnaire then discussed additional capabilities for LRS units. SMEs unanimously agreed that LRS units are capable of conducting missions other than reconnaissance, surveillance, target acquisition and battle damage assessment (BDA). Additional capabilities included force protection (60 percent), combat search and rescue

(CSAR) (85 percent), pathfinder (40 percent), having a wheeled reconnaissance capability (50 percent), and even includes sniper operations (80 percent).

When asked if a self-supporting LRS structure would solve the negative issues discussed in the previous sections, 100 percent agreed that it would. Most SMEs felt that they were not a part of the military intelligence team. They felt that if the detachment were part of an LRS type headquarters, there would be a greater understanding of training and command issues. The final question asked the SMEs directly if they thought a LRS battalion structure at corps level with the full complement of staff personnel, support facilities, and command emphasis would be the best structure to adopt. One-hundred percent of the SMEs agreed. There was one caveat to this proposed structure. The majority of the SMEs wanted detachments within the LRS battalion to maintain a habitual relationship with a division. This relationship would be for training as well as in time of conflict. This concern also stemmed from the desire for habitual relationships with external assets such as aviation.

Common Trends Between the Hypotheses and Questionnaire

The literature review resulted in the development of five hypotheses concerning LRS organizations and capabilities.

1. HUMINT is an integral part of the requirement to gain and maintain information dominance and therefore LRS is a critical capability and must be organic to the conventional headquarters at division and corps level.

2. Current LRS force structure and organizations do not adequately support a force projection Army that must be prepared to contend with MOOTW and SASO as well

as the threat of conducting operations in two near simultaneous major theater wars (MTWs).

3. There is a need for a centralized command and control element for LRS units above the company and detachment level that would be responsible for collective training in support of higher headquarters deep operations.

4. There will be a greater reliance on HUMINT and the capabilities of LRS units as the enemy threat and future battlefields encompass the urban terrain and operate in and around population bases.

5. LRS units are capable of accomplishing additional missions besides reconnaissance, surveillance, target acquisition and battle damage assessment. Specifically, the surveillance and communication capabilities of LRS units can play a critical role in force protection and the prevention of terrorist attacks on US military buildings on foreign soil. Other possible missions include combat search and rescue (CSAR) and pathfinder operations.

The method to test these hypotheses was to compare them with the responses generated by the questionnaire administered the SMEs. The SME response overwhelmingly supported each of the hypotheses generated from the literature review.

All SMEs understood and agreed that information dominance was crucial for American armed forces to gain and maintain a swift and decisive victory. They also believed that a conventional headquarters needed and would utilize an organic LRS capability to assist in the HUMINT portion of information dominance.

Ninty-five percent of the respondents concurred that the current LRS force structure and organizations do not adequately support the force projection Army required

to accomplish the emerging operational concepts of Army Vision 2010. The spectrum of conflict has evolved to include MOOTW and SASO as operations the military will deploy to support. The role of HUMINT, and therefore LRS, has increased in these operations and consequently so has the frequency. The same percentage of respondents concurred that each division and corps required their own habitual LRS support and that an ARNG LRS unit is incapable of maintaining the level of proficiency required to provide the level of support needed.

The third hypothesis was supported when 85 percent of the respondents concurred that there is a requirement for a centralized command and control element for LRS units above the company and detachment level. This headquarters would be responsible for collective training to ensure a level of proficiency to support the higher headquarters deep operations. All SMEs were cautious and did not support changing the higher headquarters unless it was a proponent of LRS or was a like organization.

The SMEs supported the fourth hypothesis unanimously. They acknowledged that there is value and relevance for LRS capabilities in future intelligence collection and information operations as it pertains to the lower end of the spectrum of conflict. Over 90 percent concurred that LRS capabilities can and will play a critical role in future MOOTW, SASO, and MOUT operations. As stated, urban terrain will degrade the advantage high tech surveillance assets would normally provide. In light of this, HUMINT will play a greater role in intelligence collection and Information Operations.

Additionally, SMEs unanimously agreed that LRS units are capable of conducting other missions other than reconnaissance, surveillance, target acquisition and BDA. The overwhelming consensus for added capabilities were in the areas of combat search and

rescue (80 percent) and pathfinder operations (70 percent). Additionally 70 percent perceived that LRS units should have a wheeled reconnaissance capability, particularly for the desert environment.

The final question asked whether the SMEs thought an LRS battalion at corps level would be the best organizational change to facilitate correcting the issues addressed in this survey and in resulting discussions. Of the SMEs, 100 percent of the SMEs concurred that this structure would be the best to resolve most if not all issues. All SMEs agreed that training the force is the most important of the two criteria this survey used to evaluate the research. They concurred that a LRS battalion would centralize the training and its focus, manage a budget against training needs, maintain the authority to approve high risk training, govern and control schools, and procure specialized equipment to facilitate readiness. All SMEs identified a correlation between training, readiness, and the ability to perform new mission profiles to support SASO HUMINT requirements.

There was a unique trend in the majority of the SMEs responses to the second criteria of tactical command and control. Half of the SMEs had a concern that the habitual relationship with a division staff and leadership could be jeopardized. Interestingly, this group of SMEs was the same group that identified having a positive experience with their divisional command group, to include the G2. They cited the importance of maintaining the habitual relationship they felt was directly related to their success while in command. The central point of this issue was the relationship and access to the external assets, such as aviation that the LRS teams would need to establish Standard Operating Procedures (SOP) to minimize the potential for compromise or mission failure. Of this group of SMEs, none felt that a LRS battalion would not provide

this relationship with the divisions. They did envision that a battalion would in fact improve the relationship with other assets by either structuring them within the battalion or develop formal agreements with the asset headquarters.

Summary

The results of the questionnaire identified that the SME population represents the LRS community well and the level of experience validates their recommendations to this research.

CHAPTER SIX

CONCLUSION

The analysis concluded that current organization and force structure for LRS units will not meet the intelligence collection requirements expressed in the emerging operational concepts addressed in *Joint Vision 2010*. The literature review and survey findings revealed that to achieve the full-spectrum dominance required to execute the operational concepts described in *Joint Vision 2010*, the Army must possess a variety of intelligence collection assets. In the arena of information dominance, technology gives the US many advantages, but should never be depended on entirely. This is especially true in an environment where the US technological capabilities do not present a distinct advantage, as in a third-world urban environment or in an environment of limited visibility due to poor weather or heavy vegetation. Human intelligence is still the most reliable form of intelligence collection and can play either the primary role or a secondary role to confirm or augment electronic, imagery, and other intelligence systems in future operations.

As identified in the literature review and the survey analysis, the requirements for LRS assets are firmly nested in current Army doctrine. Additionally, LRS capabilities and missions are clearly identified within emerging operational concepts. Yet, within the last eight years LRS units have deactivated, leaving only 50 percent of the current divisions and corps with organic LRS units. The decision to deactivate these intelligence collection units was not based on a change of doctrine or a change in the mission requirements for LRS. The decisions were not made by one of the two proponents of LRS in order to protect another unit or asset. Quite the contrary, both proponents recognize the

importance of HUMINT on the battlefield and support LRS employment and training. As discussed in chapter two, the decision to deactivate all heavy division LRSDs and two of four LRSCs was made, over the objection of both proponents and units, by the office of the Deputy Chief of Staff for Operations as a result of the Total Army Analysis (TAA) process. Consequently, under the current force structure, there are not adequate numbers of LRS units to effectively execute the potential future missions the Army will face.

Clearly, the current force structure and organization are not providing adequate LRS support required by more than half the units in the Army. The technological intelligence assets fielded since the end of Desert Storm were not designed to and cannot replace the soldier, who is the most valuable thinking, reasoning, reactive intelligence asset that can render a timely and accurate report. This has become even more of a factor in light of the analysis of the future threats to the US and global urbanization that could impair or neutralize the technological advantages that the US currently enjoys.

What are the implications if current LRS organization and force structure remains unchanged? If one can draw a conclusion from recent history, LRS units will eventually be removed from the active component and Army National Guard units will absorb the LRS mission for the entire Army. How will that affect the Army? The ARNG lacks the organization, technical knowledge and resources to train and sustain an LRS force capable of supporting AC divisions and corps. There will be a tactical reconnaissance vacuum Army-wide from the corps down to the division that technology will not be able to fill. History will no doubt repeat itself, and in a time of need, as in World War II, Korea, and Vietnam, commanders will form adhoc HUMINT reconnaissance units from within their own ranks. These dedicated soldiers will attempt to execute a mission that

they are not trained for, and consequently will assume great personal risk while the potential for mission failure increases exponentially. To ignore this issue ultimately jeopardizes the Army's most precious asset--the individual soldier. Without proper reconnaissance, without timely and accurate intelligence, a commander cannot avoid the enemy's strengths and exploit his weaknesses in order to defeat him at minimum cost to his own soldiers.

Recommendations

The following section discusses this study's recommendation based on two primary findings of this research. The first finding is that the current organization does not support the future reconnaissance requirements for the entire Army. The second is that the best structure to facilitate successful accomplishment of LRS missions is a centralized LRS organization larger than the current LRS structure.

Force Structure

Restructuring the current organization and force structure would be beneficial to the Army for the following reasons:

1. It would provide a dedicated LRS detachment (LRSD) for every division and two dedicated LRSD for each corps.
2. It would provide a battalion commander and staff that would centralize soldier selection and training, and METL development for both the AC and RC components of the battalion.
3. It would provide a trained staff that will assist the corps and subordinate division staffs in the capabilities, planning, and employment of LRSD and LRS teams.

4. It would create an organization capable of attaching a modular, tailorable, interchangeable LRS element to deploying divisions or JTF/ Brigade Combat Team Force Projection packages as required. This element would consist of a LRSD and a command and control element from the battalion headquarters, and a communications element.

5. It would provide a multicomponent organization capable of quickly integrating an activated ARNG organic unit into real-world or training operations. Additionally, the LRS battalion would ensure the organic ARNG units are trained to the same standard as organic AC units.

6. It would create an organization that could easily incorporate additional LRSDs, should the force structure expand in the future.

7. It would create an additional infantry battalion within the existing force structure, which would create additional leadership positions at the officer and noncommissioned officer level.

The results of the questionnaire suggested three possible headquarters for the LRS battalion. The first option is to designate the LRS battalion a separate infantry battalion under the corps headquarters. The LRS battalion would work directly for the corps commander and have a direct link to the corps operations officer (G3) and staff. This in essence would make the LRS battalion a maneuver element, segregating itself from the intelligence staff. The most significant benefit that this concept would provide is an accelerated planning phase. It would have a direct link to the G3, who is the only staff officer with tasking authority in the corps. The insertion of any reconnaissance asset requires resources and coordination that only the G3 can provide by tasking subordinate

units within the corps to provide. A few examples of these resources and required coordination are aviation support for insertion and exfiltration, suppression of enemy air defense, and establishing no-fire areas. Having the LRS battalion directly under corps cuts out the time consuming process of going through a brigade headquarters and the G2 staff to the G3 for tasking and support. However, separating the LRS capability from the intelligence community, its impact on intelligence collection would be severe. There would not be an organic link to the other intelligence collection assets through the G2 collection manager. The LRS team would be treated as a maneuver element and although afforded the resources to ensure survival on the battlefield and maneuver success, their mission to collect intelligence to support the PIR would be significantly impaired. Whatever role this unit has, it should not be removed from the intelligence community.

The second option is to place the LRS battalion within the corps aviation brigade. Again, this concept has merit. At one time, most LRSDs were organic to the division cavalry squadrons. The primary advantage to this concept was that the LRS battalion would have habitual aviation support. The greatest potential for compromise of an LRS mission is during the insertion and/or extraction phase of the operation (JRTC AAR, 1997). One of the major problems within the LRS community today is establishing habitual aviation support that would provide trained crews and rehearsed SOPs for LRS insertion and extraction. Doctrinal high-risk techniques include the fast rope insertion and extraction system for insertion, and the special patrol insertion and extraction system for extraction. These methods require special certification for the pilot and crew of the aircraft. If a specified aviation unit does not have LRS-type missions on their METL, there is no justification to spend increasingly shrinking training time, dollars, and

maintenance to qualify or sustain crew proficiency in these high-risk missions, but this problem would be handled by placing the LRS battalion in the aviation brigade. The primary disadvantage for this concept is the same as the first recommendation. This would create gap between the LRS battalion and the G2, undermining its primary role as an intelligence collector.

The third option is to assign the LRS battalion to the corps MI brigade. This appears to be the best solution for a number of reasons, of which the four most important are:

1. It would maintain a close relationship with the MI community within the corps.
2. A working relationship with the G2 through the MI brigade commander would enhance appropriate mission assignment.
3. It would improve the MI leadership's confidence in LRS capability by the visibility of being in the brigade.
4. It designates a technically and tactically proficient, DA select, infantry lieutenant colonel battalion commander who will ensure the proper horizontal integration among all the assets within the brigade and be recognized as the senior LRS expert.

Therefore, the conclusion of this research is that an LRS battalion be formed by consolidating current LRS detachments and companies and placed under the military brigade at corps level. The LRS battalion would be organic to the corps and would provide dedicated trained LRS teams to support corps and division intelligence requirements. Additionally, the LRS battalion would incorporate an ARNG company as part of its structure. The number of personnel within the current LRS force structure does not support every division and corps having a dedicated active component LRSD.

Additionally, one LRSD, capable of conducting surveillance of four named areas of interest, would not provide adequate support for a corps in the event of a major conflict or training exercise. This is particularly true during surge operations, requiring up to six NAIs to be serviced by a LRSD at one time. In that event, ARNG LRSC organic to the LRS battalion would be activated to support a corps-sized combat operation or training exercises in order to ensure both the corps and all subordinate divisions have LRS assets for their operations.

Mission Statement

The LRS battalion will provide timely and accurate tactical intelligence through the rapid deployment of a tailorable long-range surveillance force capable of conducting reconnaissance and surveillance operations, battle damage assessment, and target guided operations in support of corps and division intelligence requirements in their area of responsibility.

The LRS battalion would provide commanders at the corps and division a dedicated, all-weather HUMINT collection asset capable of reconnaissance, surveillance, target acquisition, battle damage assessment, force protection, and CSAR operations. The LRS battalion will grant commanders access to real-time intelligence throughout the depth of their area of interest beyond what is currently provided by battalion scouts, brigade reconnaissance troops, and division cavalry squadrons. Additionally, the LRS battalion bridges the gap between current tactical and strategic reconnaissance assets, providing timely and accurate intelligence at the operational level during periods of adverse weather conditions that can prohibit the use of aerial intelligence collectors.

Capabilities

The LRS battalion will provide the corps commander a dedicated battalion commander and staff as experts in LRS operations and capabilities. It will provide a centralized headquarters for training and METL development for LRS companies, detachments, and teams. The LRS battalion will have the capability to:

1. Be committed in specific locations within enemy-held territory by stay-behind methods or delivery by land (wheeled vehicle or foot), water, or air (HAHO or HALO parachute).
2. Conduct reconnaissance and surveillance operations in enemy-held territory for up to seventy-two hours in all types of terrain and environments with no external support once in their area of operation.
3. Conduct target acquisition and battle damage assessment missions by providing a ground based laser for precision guided munitions, emplacing beacons for selective bombing, call for fire to support artillery and close air support (CAS) attacks .
4. Provide a dedicated combat search and rescue (CSAR) asset to division and corps commanders.
5. Provide force protection throughout the battlefield by providing early warning, counter reconnaissance, surveillance and intelligence.
6. Employ sniper capabilities in support of force protection for CSAR, target acquisition, and reconnaissance and surveillance operations.
7. Operate at the team level with two three-man reconnaissance and surveillance (R&S) teams as well as a command, control and communications element (MSS).

8. Provide an organic mobile (wheeled) reconnaissance asset to a supported higher command.
9. Establish long-range communications using HF, VHF, UHF, or SATCOM between the base stations, the controlling headquarters, and LRS teams
10. Be recovered by air, land, or water; link up with advancing forces; or return using evasion techniques.
11. Operate using planned, automatic resupply drops or special equipment cache sites set up by an organic LRS detachment or other friendly forces.

Limitations

The LRS battalion would be limited by the following considerations:

1. Mobility is restricted to foot movement once employed in the area of operations.
2. LRS teams cannot maintain continuous communications with the controlling headquarters because of movement requirements, potential for compromise, equipment limitations and the enemy's use of radio and electronic surveillance devices. Teams can establish communications at scheduled times or to report critical combat information.
3. Army or Air Force air transportation that would move the unit to the area of operations is not organic, and therefore competes with other requirements.

Organization

The LRS battalion would consist of a Headquarters Company (active-component), one LRS Company (ARNG) and one LRS detachment for each subordinate division in the corps. Additional RC LRS detachments may be incorporated into the structure as required. The combined active and reserve component strength is approximately 625

personnel (425 AC, 200 ARNG). Figure 7 depicts a wire diagram of a generic LRS battalion.

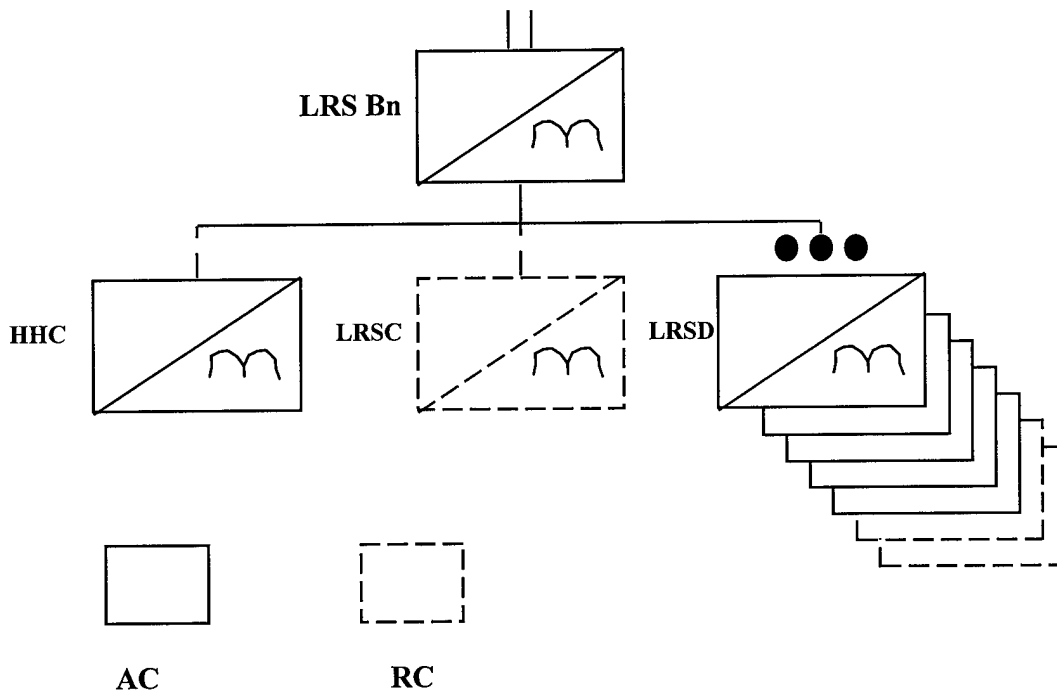


Figure 7. Generic LRS Battalion Structure

The Headquarters Company would consist of approximately 150 active component personnel to include the battalion command group, staff, and logistics personnel. The company would provide command and control as well as all essential administrative and logistical support to the LRSDs. Additionally, HHC would provide personnel from its operations, intelligence, communications and medical sections to augment a LRSD to support an independent deployment of that detachment. Figure 8 depicts a Headquarters Company of a LRS battalion.

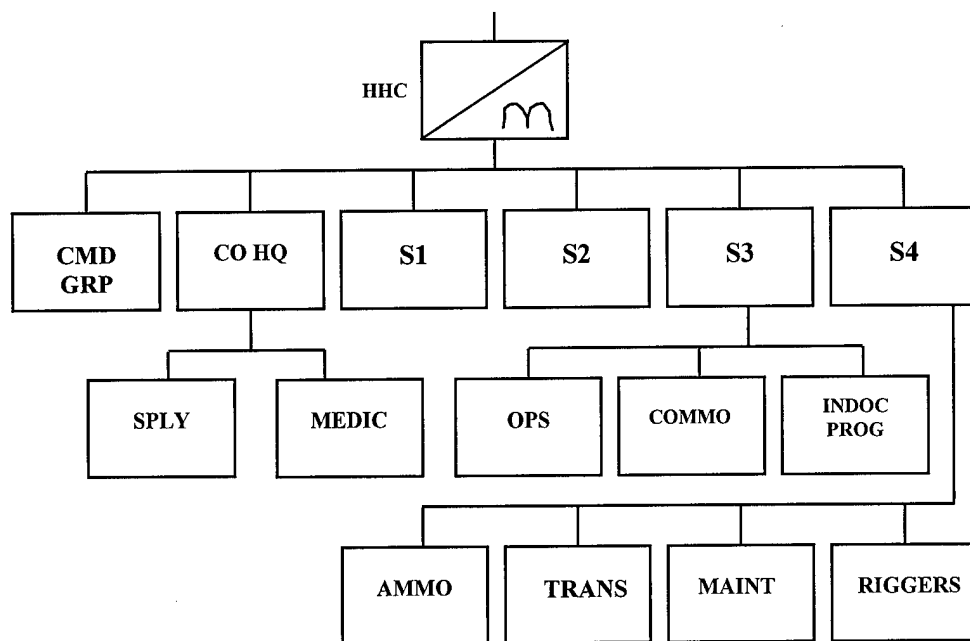


Figure 8. LRS HHC Structure

The LRS detachments will be primarily active component, however, as mentioned earlier, reserve component LRSDs can be incorporated in the battalion structure as required. Regardless of the component, an LRSD will consist of a command and control element (commander, executive officer, detachment sergeant, operations sergeant, fire support sergeant and supply sergeant), six nine-man reconnaissance squads and two four-man communications sections for a total of sixty-eight personnel. The structure of the detachment does not change other than the number of personnel. The LRSD is depicted in Figure 9.

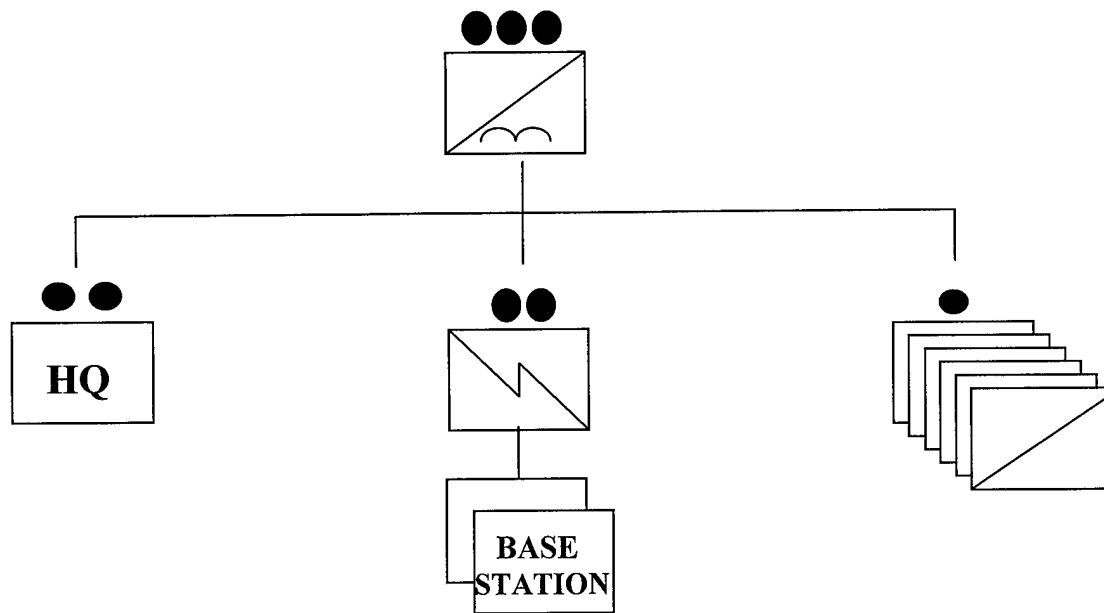


Figure 9. LRS Detachment Structure

The LRS team is the heart and soul of the organization and is the level at which LRS is employed into its area of operation. It is comprised of nine men. The team leader is a ranger-qualified staff sergeant and two ranger-qualified sergeant team leaders are the assistant team leaders. The remainder of the team is comprised of scout observers and radio telephone operators. This nine-man element is capable of providing reconnaissance support to two named areas of interest (NAIs) or target areas of interest (TAIs) simultaneously provided they are in close proximity to each other. The team can maintain direct communications with its higher headquarters.

The LRS battalion concept embodies all of the capabilities and missions of the present LRS organizations. In fact, it would absorb the skilled soldiers from the current LRS units as the battalion is formed. It would overcome many of the limitations of

current LRS units. Tables 1 through 8 compare the current structure to the proposed structure by the Battle Operating System (BOS).

Table 1. Comparison of current LRS units versus the LRS battalion by Maneuver

| MANEUVER | |
|---|---|
| LRS Unit Limitations | LRS Battalion Advantages |
| A six-man team restricts ability to cover more than one area of interest. | A nine-man team affords the opportunity cover two areas of interest with one team, or to maintain surveillance on an objective and conduct a simultaneous active reconnaissance or other tasks. |
| A six-man team restricts the ability to conduct a zone reconnaissance. | A nine-man team provides the capability to conduct a doctrinal zone reconnaissance by three sub-units using doctrinal methods. |

Table 2. Comparison of current LRS units versus the LRS battalion by IO

| INFORMATION OPERATIONS | |
|---|---|
| LRS unit Limitations | LRS battalion Advantages |
| A six-man LRS team has limited impact based on their size and mission focus | A nine-man team would have a greater impact than a six-man team with mission focus placed on this BOS |

Table 3. Comparison of current LRS units versus the LRS battalion by Fires

| FIRES | |
|--|---|
| LRS unit Limitations | LRS battalion Advantages |
| Though a doctrinal mission, LRS team members are rarely trained or equipped to conduct target acquisition missions besides calling for and adjusting indirect fires. Equipment weight is excessive for a six-man team. | A battalion will be able to procure target acquisition equipment and a nine-man team will be able to carry the equipment and better employ it while maintaining situational awareness and security. |

Table 4. Comparison of current LRS units versus the LRS battalion by Reconnaissance, Surveillance and Intelligence

| RECONNAISSANCE, SURVEILLANCE AND INTELLIGENCE | |
|--|---|
| LRS unit Limitations | LRS battalion Advantages |
| Sustain seventy-two hours or three days of continuous surveillance before supply and fatigue degrades their capability | Nine-man team can maintain five days of continuous surveillance |
| The present LRS structure does not provide a tactical reconnaissance element with every division in the force structure. | The LRS battalion will provide a dedicated LRSD to conduct all METL tasks for each division in the corps. |

Table 5. Comparison of current LRS units versus the LRS battalion by Air Defense

| AIR DEFENSE | |
|---|---|
| LRS unit Limitations | LRS battalion Advantages |
| There is no significant difference between the two structures | There is no significant difference between the two structures |

Table 6. Comparison of current LRS units versus the LRS battalion by Mobility and Survivability

| MOBILITY AND SURVIVABILITY | |
|---|---|
| LRS unit Limitations | LRS battalion Advantages |
| Teams are lightly armed and have limited self-defense capabilities. They fight only to break contact. | Nine-man team would increase firepower and improve survivability. |
| Present LRS structure does not provide any of the resources to conduct CSAR operations | The LRS battalion would have a dedicated and trained element capable of conducting CSAR |

Table 7. Comparison of current LRS units versus the LRS battalion
by Command and Control

| COMMAND AND CONTROL | |
|--|--|
| LRS unit Limitations | LRS battalion Advantages |
| Present LRS organization possesses no permanent command and staff structure above the detachment or company level. | Will provide a battalion commander and staff to centralize training and METL development for all subordinate elements to include the reserve component |
| Present LRS units are not modular and do not possess the resources or manpower to operate in more than one C4I cell. | The battalion possesses the flexibility to provides C4I cells throughout the corps and to independent deployments |

Table 8. Comparison of LRSU versus CRB by Combat Service Support

| COMBAT SERVICE SUPPORT | |
|---|--|
| LRS unit Limitations | LRS battalion Advantages |
| Organic medical capability is limited to individual first aid and combat lifesaver skills. | A medical section with PA will be at the battalion level and modular structure to support deployed elements |
| Present LRS organization has no logistics or personnel service support above the detachment or company level. | The CRB will possess organic CSS to man, arm, fuel, fix, sustain soldiers and their systems. Provide personnel service, combat health field service, rigger, and general supply support. |

Closing

This study has determined that a centralized structure for LRS is necessary to provide the LRS units the support to accomplish all future mission requirements. Based on this finding, the SMEs of the LRS community have overwhelmingly agreed that a battalion type organization is the best structure to facilitate this change.

The simplest course of action to fix the problem would be to double the LRS force structure to ensure that every division and corps have the proper assets. While this course of action is suitable and distinguishable from the status quo, it is neither feasible nor acceptable based on the congressional mandate setting the total number of personnel in the Army. The recommended LRS battalion formed at corps provides a structure that does not increase the current LRS personnel strength and resolves the current issues of inadequate command and control, and training the force. The numerous benefits of this recommendation have been discussed previously in this chapter. However, there is an additional advantage that this recommendation has over the current organization. It supports the Army initiative to integrate the active component with the reserve component. This initiative provides a venue for the reserve and National Guard to quickly mobilize and conduct home station training prior to a deployment into a theater of operation. Incorporating a reserve component LRSC into the LRS battalion structure supports this initiative. The battalion leadership and staff will provide a better training focus during peace time. At a time of mobilization, this training focus will have significantly improved the training posture and will accelerate the mobilization phase prior to deploying into a theater of operation. The end-state will be a better-trained reserve component LRSC ready to augment the battalion quickly.

Recommendation for Additional Research

Previous research has concluded that an LRS battalion structure can be organized without increasing the current LRS personnel strength. This research has concluded that a LRS battalion resolves or improves highlighted issues in command and control, and the relationship with corps and division staffs and command groups. It would best facilitate all training requirements associated with a LRS team's mission and survivability. It will better facilitate training and mission readiness to conduct operations involving a new METL in support of all future intelligence requirements.

Additional research is needed in the area of equipping the force. This would include identifying the tactical equipment needed in the battalion to support all phases of a LRS operation, the procurement of this equipment, budget, and equipment development. The conclusion of this study could produce a final and complete recommendation to support a change to the Army structure. Each of these areas require study in order to ensure that all aspects of LRS and reconnaissance operations are in line with the most current information, techniques, and equipment available to ensure that this valuable intelligence collection asset moves forward with *Army Vision 2010* to the Army After Next.

APPENDIX
QUESTIONNAIRE

Establish SMEs command climate:

- a. Did they have an MI battalion commander or CAV squadron commander for their next higher HQ.
- b. Was their battalion in a MI bde or within a division HQ.
- c. Time in command.
- d. JRTC, NTC or equivalent experience (Defined as # of rotations)
- e. How involved was their G2.

Defined as:

Heavy – Most decisions go through them

Medium – Only involved with C2 of tactical mission & budget decisions

Light – Only C2 of tactical missions

None – Self explanatory

- f. How involved was their command group.

Defined as:

Heavy – Most decisions go through them

Medium – Only involved with C2 of tactical missions & budget decisions

Light – Only C2 of tactical missions

None – Self explanatory

1. Did you have a battalion commander who understood LRS issues to include employment, training, and command and control?

2. What were some good decisions your higher headquarters made in support of LRS training issues?

3. What were some bad decisions your higher headquarters made in support of LRS training issues?

4. What was the greatest training distracter (i.e., budget, time, training approval) for your LRS unit?

5. Could a self-supporting LRS structure have solved this training distracter?
6. What was the greatest tactical command and control challenge you experienced as an LRS commander?
7. Could a self supporting LRS structure have solved this C2 challenge?
8. Do you think the current LRS structure is a good one for future LRS and its missions?
9. Using command and control, and training as criteria, do you think an LRS battalion organized at corps level would be a better structure for future LRS organizations?

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